

**FISCAL YEAR 1975 AUTHORIZATION FOR
MILITARY PROCUREMENT, RESEARCH
AND DEVELOPMENT, AND ACTIVE
DUTY, SELECTED RESERVE AND CIVIL-
IAN PERSONNEL STRENGTHS**

HEARINGS
BEFORE THE
COMMITTEE ON ARMED SERVICES
UNITED STATES SENATE
NINETY-THIRD CONGRESS

SECOND SESSION

ON

S. 3000

TO AUTHORIZE APPROPRIATIONS DURING THE FISCAL YEAR 1975 FOR PROCUREMENT OF AIRCRAFT, MISSILES, NAVAL VESSELS, TRACKED COMBAT VEHICLES, TORPEDOES, AND OTHER WEAPONS, AND RESEARCH, DEVELOPMENT, TEST, AND EVALUATION FOR THE ARMED FORCES, AND TO PRESCRIBE THE AUTHORIZED PERSONNEL STRENGTH FOR EACH ACTIVE DUTY COMPONENT AND OF THE SELECTED RESERVE OF EACH RESERVE COMPONENT OF THE ARMED FORCES AND OF CIVILIAN PERSONNEL OF THE DEPARTMENT OF DEFENSE, AND TO AUTHORIZE THE MILITARY TRAINING STUDENT LOADS, AND FOR OTHER PURPOSES

PART 1

Authorizations

FEBRUARY 5, 1974

Printed for the use of the Committee on Armed Services



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PART 1

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WASHINGTON : 1974

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(II)

MILITARY PROCUREMENT, FISCAL YEAR 1975

TUESDAY, FEBRUARY 5, 1974

U.S. SENATE,
COMMITTEE ON ARMED SERVICES,
Washington, D.C.

The committee met, pursuant to notice, at 10:05 a.m., in room 1114, Dirksen Senate Office Building, Hon. John C. Stennis (chairman).

Present: Senators Stennis (presiding), Symington, Cannon, McIntyre, Byrd, Jr., of Virginia, Hughes, Thurmond, Tower, Dominick, and Taft.

Also present: T. Edward Braswell, Jr., chief counsel and staff director; W. Clark McFadden II, counsel; John T. Ticer, chief clerk; Hyman Fine, Don L. Lynch, John A. Goldsmith, George Foster, Charles H. Cromwell, Edward B. Kenney, Robert Q. Old, professional staff members; and Christine E. Cowart, clerical assistant.

[A copy of S. 3000 follows:]

[S. 3000 93d Cong., 2d sess.]

A BILL To authorize appropriations during the fiscal year 1975 for procurement of aircraft, missiles, naval vessels, tracked combat vehicles, torpedoes, and other weapons, and research, development, test and evaluation for the Armed Forces, and to prescribe the authorized personnel strength for each active duty component and of the Selected Reserve of each Reserve component of the Armed Forces and of civilian personnel of the Department of Defense, and to authorize the military training student loads, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

TITLE I—PROCUREMENT

SEC. 101. Funds are hereby authorized to be appropriated during the fiscal year 1975 for the use of the Armed Forces of the United States for procurement of aircraft, missiles, naval vessels, tracked combat vehicles, torpedoes, and other weapons as authorized by law, in amounts as follows:

AIRCRAFT

For aircraft: for the Army, \$339,500,000; for the Navy and the Marine Corps, \$2,960,600,000; for the Air Force, \$3,496,600,000.

MISSILES

For missiles: for the Army, \$459,200,000; for the Navy, \$620,600,000; for the Marine Corps, \$76,000,000; for the Air Force, \$1,610,800,000.

NAVAL VESSELS

For naval vessels: for the Navy, \$3,562,600,000.

TRACKED COMBAT VEHICLES

For tracked combat vehicles: for the Army, \$331,900,000; for the Marine Corps, \$80,100,000.

(1)

TORPEDOES

For torpedoes and related support equipment; for the Navy, \$187,700,000.

OTHER WEAPONS

For other weapons: for the Army, \$53,400,000; for the Navy, \$25,600,000; for the Marine Corps, \$500,000.

TITLE II—RESEARCH, DEVELOPMENT, TEST AND EVALUATION

SEC. 201. Funds are hereby authorized to be appropriated during the fiscal year 1975 for the use of the Armed Forces of the United States for research, development, test and evaluation, as authorized by law, in amounts as follows:

For the Army, \$1,985,976,000;
For the Navy (including the Marine Corps), \$3,264,503,000;
For the Air Force, \$3,518,860,000; and
For the Defense Agencies, \$555,700,000, of which \$27,000,000 is authorized for the activities of the Director of Test and Evaluation, Defense.

TITLE III—ACTIVE FORCES

SEC. 301. For the fiscal year beginning July 1, 1974, and ending June 30, 1975, each component of the Armed Forces is authorized an end strength for active duty personnel as follows:

- (1) The Army, 785,000;
- (2) The Navy, 540,380;
- (3) The Marine Corps, 196,398;
- (4) The Air Force, 630,345.

TITLE IV—RESERVE FORCES

SEC. 401. For the fiscal year beginning July 1, 1974, and ending June 30, 1975, the Selected Reserve of each Reserve component of the Armed Forces will be programed to attain an average strength of not less than the following:

- (1) The Army National Guard of the United States, 379,848;
- (2) The Army Reserve, 215,842;
- (3) The Naval Reserve, 107,526;
- (4) The Marine Corps Reserve, 36,703;
- (5) The Air National Guard of the United States, 89,128;
- (6) The Air Force Reserve, 51,319;
- (7) The Coast Guard Reserve, 11,700.

SEC. 402. The average strength prescribed by section 401 of this title for the Selected Reserve of any Reserve component shall be proportionately reduced by (1) the total authorized strength of units organized to serve as units of the Selected Reserve of such component which are on active duty (other than for training) at any time during the fiscal year, and (2) the total number of individual members not in units organized to serve as units of the Selected Reserve of such component who are on active duty (other than for training or for unsatisfactory participation in training) without their consent at any time during the fiscal year. Whenever such units or such individual members are released from active duty during any fiscal year, the average strength for such fiscal year for the Selected Reserve of such Reserve component shall be proportionately increased by the total authorized strength of such units and by the total number of such individual members.

TITLE V—CIVILIAN PERSONNEL

SEC. 501. (a) For the fiscal year beginning July 1, 1974, and ending June 30, 1975, the Department of Defense is authorized an end strength for civilian personnel as follows:

- (1) The Department of the Army, 358,717;
- (2) The Department of the Navy, including the Marine Corps, 323,529;
- (3) The Department of the Air Force, 269,709;
- (4) Activities and agencies of the Department of Defense (other than the military departments), 75,372.

(b) In computing the authorized end strength for civilian personnel there shall be included all direct-hire civilian personnel employed to performed military functions administered by the Department of Defense (other than those performed by the National Security Agency) whether in permanent or temporary positions and whether employed on a full-time, part-time, or intermittent basis, but excluding special employment categories for students and disadvantaged youth such as the stay-in-school campaign, the temporary summer aid program and the Federal junior fellowship program and personnel participating in the worker-trainee opportunity program: *Provided*, That whenever the Secretary of the military department concerned or the Secretary of Defense determines that the direct substitution of civilian personnel for military personnel will result in economy without adverse effect upon national defense, such substitution may be accomplished without regard to the numbers of civilian personnel authorized by this section: *Provided further*, That when a function, power, or duty or activity is transferred or assigned to a department or agency of the Department of Defense from a department or agency outside of the Department of Defense or from a department or agency within the Department of Defense, the civilian personnel end strength authorized for such departments or agencies of the Department of Defense affected shall be adjusted to reflect any increases or decreases in civilian personnel required as a result of such transfer or assignment.

Sec. 502. When the Secretary of Defense determines that such action is necessary in the national interest, he may authorize the employment of civilian personnel in excess of the number authorized by section 501: *Provided*, That the number of additional personnel authorized to be employed pursuant to the authority of this section shall not exceed 1 per centum of the total number of civilian personnel authorized for the Department of Defense by section 501: *Provided further*, That the Secretary of Defense shall promptly notify the Congress of any authorization to increase civilian personnel strength pursuant to this authority.

TITLE VI—MILITARY TRAINING STUDENT LOADS

Sec. 601. For the fiscal year beginning July 1, 1974, and ending June 30, 1975, each component of the Armed Forces is authorized an average military training student load as follows:

- (1) The Army, 97,638;
- (2) The Navy, 71,279;
- (3) The Marine Corps, 26,262;
- (4) The Air Force, 52,900;
- (5) The Army National Guard of the United States, 12,111;
- (6) The Army Reserve, 6,673;
- (7) The Naval Reserve, 2,536;
- (8) The Marine Corps Reserve, 3,403;
- (9) The Air National Guard of the United States, 2,359; and
- (10) The Air Force Reserve, 1,126.

TITLE VII—GENERAL PROVISIONS

Sec. 701. Subsection (a) (1) of section 401 of Public Law 89-367, approved March 15, 1966 (80 Stat. 37), as amended, is hereby amended to read as follows:

"(a) (1) Not to exceed \$1,600,000,000 of the funds authorized for appropriation for the use of Armed Forces of the United States under this or any other Act are authorized to be made available for their stated purposes to support Vietnamese military forces on such terms and conditions as the Secretary of Defense may determine: *Provided*, That nothing contained in this section shall be construed as authorizing the use of any such funds to support Vietnamese military forces in activities designed to provide military support and assistance to the Government of Cambodia or Laos."

This Act may be cited as the "Department of Defense Appropriation Authorization Act, 1975".

COMMITTEE PROCEDURE

The CHAIRMAN. Ladies and gentlemen, it is obvious that this is an open hearing. I state that so that it will be in the record.

Members of the committee, I invited the press, television, and radio to come here this morning. This is very important testimony. Dr. Schlesinger is asking for almost \$100 billion, and I know he is going to have a strong statement to justify it.

Mr. Secretary, on behalf of the entire committee, I welcome you and Admiral Moorer as we begin the initial presentation of the Department of Defense program for this year. Although the President's budget, which arrived just yesterday, is 2 weeks late, the committee does appreciate your willingness to appear immediately, in order that we can proceed promptly with these hearings.

Members of the committee, I feel at this first sitting on the posture hearings that it is the Secretary of Defense's day, and he is entitled to a chance to present his case. We won't restrict you in any way.

Admiral Moorer, we won't restrict you in any way either. You may put your statement in the record, and then emphasize such points as you wish. You may for emphasis pick out certain subject matters. Just present it in your own good way. You are entitled to your chance to do that under favorable circumstances.

When you have completed that, then we will have some questions. We will rotate the questions.

You are a member of the Cabinet, Mr. Secretary. We look to you for facts and for some guidance and information freely given, whether it is favorable or unfavorable to you and the Department of Defense.

Admiral Moorer, you were formerly Chief of Naval Operations, and now you are Chairman of the Joint Chiefs of Staff, the highest ranking military officer in all the Government. You have been very valuable to us in giving information and opinions. I know I have been in some tight places and sent for you and always received a forthright, frank, and helpful statement. It has been helpful to me, and I am sure others have had the same experience.

Prior to your testimony, the chair would like to make a few preliminary observations.

OPENING STATEMENT BY THE CHAIRMAN

The funding request for the Department of Defense, which the President made yesterday as a part of his overall budget, is in two forms: First, there is a supplemental fiscal year 1974 request totaling \$6.2 billion; and second, a fiscal year 1975 Department of Defense request for budget authority totaling \$92.9 billion. The sum of these two requests is \$99.1 billion. This sum compares to \$80.2 billion, including the military assistance program, which was appropriated for the Department of Defense last year for fiscal year 1974.

In terms of budget authority these two requests are the largest ever requested in 1 year except for 1942, for which the total was \$99.5 billion. The fiscal year 1975 estimated outlays, totaling \$85.8 billion, constitute the largest ever for the Department of Defense. I am fully aware of the effects of inflation, the constant dollar argument, and other factors—all of which have some merit—and I wish to make clear that I shall continue to support a strong and adequate national defense. I think that these requests for a record peacetime budget require a most stringent review and adequate justification in the Congress; and whenever possible savings and reductions should be made.

We are all aware of the soaring manpower costs in Defense, with the fiscal year 1975 civilian payroll alone being \$14.9 billion—up \$2.1 billion from fiscal year 1974. This is more than the entire procurement portion of the authorization for most years. The military payroll alone for fiscal year 1975 totals \$19 billion—up \$3 billion from fiscal year 1974. Total pay and related manpower costs for fiscal year 1975 will be about \$47.9 billion.

I was surprised, Mr. Secretary, that the Department plans to increase its civilian employment by 30,800 between December 1973 and June 30, 1974, bringing it to a level of 1,028,800 alone. That is the way we figured it up, and we think that is substantially correct. This proposed increase seems to be inconsistent with the announced intent of the Department to achieve greater manpower efficiencies.

You and your predecessors have made reductions in the last few years of these civilian employees. I don't overlook that. But you are asking for this increase.

Throughout the entire departmental testimony there is the concept that there has been little modernization in the forces during the course of the Vietnam war. Let me emphasize that we can never stand still and must constantly modernize to be prepared. But I think the record should reflect that there was a considerable degree of modernization during the Vietnam years in terms of new programs and weapons. For example, the Army helicopters have increased from about 4,000 in 1965 to well over 8,000 by 1970. The early model F-4s have been replaced with much improved later models; the A-7 fleet has been added to the Navy and Air Force; a new class of SSN-688 attack submarine has been funded, as well as two nuclear aircraft carriers. The Poseidon conversion program is well underway to completion as well as the Minuteman III program. There are also other examples.

The chair would like to note that Senator Symington, in response to my request, has agreed to chair the full committee in its consideration of the fiscal year 1974 supplemental request. Certain high points of this request may be covered today. The details, however, will be considered in later separate hearings, and you need not hesitate in covering that today. But the rest of it will be in separate hearings later, and you can come back, of course, on that, Mr. Secretary. We might consider putting some of those items into the fiscal year 1975.

I have already made a statement on the floor of the Senate—I didn't tell Senator Symington I was going to do it—I made a statement thanking him and emphasizing his fine services to the committee last year as acting chairman and other ways. I won't repeat those sentiments here for this record, Senator. But I thank you very much personally and officially for the fine job that you did.

Senator SYMINGTON. Will the chairman yield?

The CHAIRMAN. Yes.

Senator SYMINGTON. I didn't know about that statement until yesterday; and I do thank you for it.

The CHAIRMAN. All right.

The chair would emphasize that hearings will be expedited on the entire Defense program this year by attempting to avoid the waste of time consumed in the past describing rather than justifying the various programs. All witnesses may place in the record statements

of any desired length. Their verbal testimony, however, should be straight to the point of supporting the programs, unless you want to modify the programs. The committee will thereafter weigh all the evidence in deciding whether the many items are justified.

Without taking more time I emphasize that you gentlemen are welcome here. We are glad to have those attending with you.

Mr. Secretary, you may proceed.

**STATEMENT OF HON. JAMES R. SCHLESINGER, SECRETARY OF
DEFENSE**

Secretary SCHLESINGER. Mr. Chairman, I endorse your opening remarks. I present here the first postwar, posthostilities budget of the Department of Defense. We expect that our budget will be subject to the most stringent review. We expect also, if past history is any guide, that there will be items in the budget that will be questioned and that the Congress will remove. And we are quite prepared for that, Mr. Chairman because we recognize that any budget of so great a size will have unevenness in it, and that it is the duty of the Congress to examine it closely.

We hope to justify, by and large, the requests that we are making to you, however. And if, in view of America's responsibilities in the world, you discover that in your judgment our requests are unduly modest, we will expect that you will add additional funds in those programs.

Mr. Chairman, I am talking today about both the fiscal year 1975 defense budget and the fiscal year 1974 supplemental budget request. Your earlier reference was to a \$6.2 billion supplemental request. If I may modify your statement, Mr. Chairman, \$3.4 billion of that request was discussed at length both with this committee and with the Appropriations Committees last year in our original fiscal year 1974 budget proposal. It is due to a change in administrative procedures that this \$3.4 billion supplemental for pay, is included again at this time. So we are really dealing today with a \$2.8 billion readiness supplemental request that reflects what we regard as our lessons learned from the recent Middle Eastern conflict, as well as our fiscal year 1975 request of \$92.6 billion.

The President's request for fiscal year 1974 was \$85 billion. In addition, he later requested \$2.4 billion for security assistance related to Israel and Cambodia. As compared to the President's request of last January, therefore, the fiscal year 1975 budget is up approximately \$7.6 billion. As compared to the total requests by the President for fiscal year 1974, including the supplemental requests, the fiscal year 1975 budget is up approximately \$5.4 billion over fiscal year 1974. We do have some program expansion in fiscal year 1975, and we will discuss those matters with you in greater detail.

GENERAL OUTLINE

- I. Perspective on worldwide role
- II. Strategic forces
- III. General purpose forces
 - A. NATO
 - B. Naval

- IV. Budget overview
- V. Management of resources
 - A. Manpower
 - B. Readiness
 - C. R. & D.
 - D. Procurement & aging

Mr. Chairman, I have indicated on this chart at the right some of the questions that I should like to discuss with the committee this morning in keeping with your advice to me. We have not submitted a lengthy posture statement, although this will follow at a later date. We will try to keep this as informal as we possibly can, because I think that that will lead to a far better exchange and a far better illumination of the issues.

Let me begin by talking about the worldwide role of the United States.

Senator SYMINGTON. Excuse me, Mr. Secretary. Are you reading from your statement?

Secretary SCHLESINGER. No, sir. I have submitted a brief statement for the record. If the committee wishes I can read the statement into the record.

Senator SYMINGTON. No. I just wanted to try to follow you.

The CHAIRMAN. May I say for the benefit of those who came in, since I covered it before, that the Secretary and I talked about this, and I told him that we thought this was his day and he could take this up in any way he saw fit and pick out the points he wanted to particularly present, in an informal way if he wanted to, and then we will have questions later.

We will put the full statement in the record.

Secretary SCHLESINGER. Mr. Chairman, I should like to start by presenting some perspective on the U.S. role in the world, because that is what drives our budget considerations. There will be divergences in judgment among American citizens about the appropriate role for the United States in the world, and such divergences will be reflected in different estimates as to what the Department of Defense should spend.

The psalmist tells us, Mr. Chairman, that where there is no vision the people perish. Consequently, I should like to outline at the outset the vision that I have—with which some people and some members of this committee may of course disagree—with regard to the U.S. role in the world.

The United States now, unlike the period before 1939 or even before 1945, bears the principal burden of maintaining the worldwide military equilibrium that underlies the survival and the security of the free world. This is not a role that we have welcomed, Mr. Chairman, but it is a role that historical necessity has thrust upon us. For a variety of reasons, the burden of responsibility falls on the United States. There is nobody else to pick up the torch if the United States fails to carry it.

In fulfilling this responsibility, Mr. Chairman, we recognize that we are dealing in a world which is militarily dominated by two states, ours and the Soviet Union. There is no other military capability that is comparable, or even nearly comparable, to these two states.

Consequently, in judging the military balance, we must look at the Soviet Union and we must recognize that military force comparisons are based upon military capabilities which are spread around the world. This does not suggest that we are not hopeful with regard to the future peaceful evolution of world politics. But we must look realistically, whatever our hopes, at the evolution of our policies and those of the Soviet Union with regard to these military forces.

We recognize that we and our allies are at the present time discussing mutual and balanced force reductions in central Europe with the Soviet Union, and we, ourselves, are negotiating bilaterally with the Soviets with regard to strategic arms limitations. We are hopeful about possible developments in both of these negotiations. But while we pursue negotiations about the reduction of arms in furtherance of détente, it is my judgment that we must maintain a worldwide military equilibrium. Short of that, we create the possibility of vacuums and temptations that, in my judgment, would not be consistent with the military equilibrium which undergirds détente and the prospect of future improvements in our political relations with the Soviet Union.

The Soviet Union has historically been a relatively prudent and sober power, and I trust that it will continue to be prudent and sober. I hope that as a result of its recognition, which we share, that there is no alternative to peaceful cooperation, that we shall gradually achieve a world in which security is based on something more than a balance of arms. But until such a time arrives, we must recognize what the relation of military forces around the world really is.

We do not discuss the military posture of Chad, Nigeria or Guatemala. However, we are very much concerned about the military posture of the Soviet Union. This is not to imply that we regard the Soviet Union in some sense as having a political stance that is threatening. That is not our intention, Mr. Chairman. But we must recognize the military capabilities, and the Soviet Union has these in abundance.

We are deeply interested in the progress of détente. But sometimes we are asked, Mr. Chairman, why do we need to maintain such large defense forces as long as we have détente and are pursuing détente? The answer is that there is no inconsistency between the maintenance of our military strength and the hope for détente. As members of the committee well know, our country historically has been symbolized by the eagle, which holds in one talon a clutch of arrows and in the other talon an olive branch. That symbol has reflected the policies of the United States from its inception. We certainly hope for peaceful evolution, but we must stay prepared for the alternative.

Mr. Chairman, I will talk today about some changes with regard to strategic forces. But I should like to emphasize first that strategic forces establish a framework for deterrence. It is the objective of the United States to see to it that we will not have early recourse to the use of nuclear weapons. It is the preference of the United States that today will be on the need for the maintenance and strengthening of our general purpose forces.

Much has been said, Mr. Chairman, about strategic forces. They are, of course, important and somehow glamorous. But my emphasis

that today will be on the need for the maintenance and strengthening of our general purpose forces.

Mr. Chairman, if I may turn to a second subject, which is the strategic forces themselves, let me mention a number of items at the outset. First, let me recall the campaign of 1960 and the attitude President Kennedy took at that time. For a period of time prior to 1960 the United States had a virtual nuclear monopoly. At about that time it was perceived that our monopoly advantage would ebb; and, in fact, it not only began to ebb, but by 1966-67 the Soviets had a very substantial intercontinental counter deterrent. During the early 1960's it was stated quite clearly by candidate Kennedy and then by President Kennedy—and also by a large majority of Americans in both parties—that the United States needed alternatives other than suicide or surrender; that it needed options which did not imply immediate escalation to major nuclear war. If anything, Mr. Chairman, the need for options other than suicide or surrender, other than escalation to all out nuclear war, is more important for us today than it was in 1960, because of the growth in the capabilities possessed by other powers. What we are now doing, both on the strategic forces side and on the general purposes forces side, is intended to strengthen those options in between suicide and surrender.

A second point that I should make in the strategic forces area, Mr. Chairman, is that we see no possibility during the next 15 years at least, if ever, of developing any active defense capability to limit damage significantly to the United States from a well-coordinated nuclear attack. That is beyond the technological capabilities of the United States, and our budget reflects that reality in a number of ways.

On the one hand, we are reducing our active air defenses and are changing our air defense mission in ways I shall describe later. We are also holding out to the Soviet Union the prospect of restraining ourselves to but one ABM site, rather than going ahead with the second site that is permitted under the Strategic Arms Limitation Treaty. Once again, we hope for restraint on both sides.

With regard to air defenses, we must recognize that at the present time the Soviet Union can target any city in the United States that it desires; that there is no protection in nuclear war provided by air defenses so long as the Soviets depend primarily upon ballistic missiles; and that, as long as there is no prospect of a ballistic missile defense, we must have a complementarity between our air defenses and our missile defenses. As a consequence, we are eliminating those components of the air defense systems which are designed to protect American cities against bomber attack in nuclear warfare. We will retain those elements of the air defense systems which are designed to give the United States control of its air spaces in a general way, and also air defenses to protect against conventional attacks, particularly the possibility of attacks in the southeastern United States.

We must recognize, Mr. Chairman, that there is no protection for American cities against a coordinated strike by the strategic forces of the Soviet Union. And cruel as it is, we are acknowledging that reality. This comes, I think, as a surprise to some members of the public, but it is something that must be understood.

In order to protect the cities of the United States we rely, therefore, upon deterrence. In order to protect the United States and its allies generally we rely upon deterrence, and the basis of the changes we are making in our force structure this year are to shore up deterrence across the board, across the entire spectrum of risk.

We expect that by improving deterrence across the board, we will reduce even lower the probability of a nuclear clash between ourselves and other major powers. However, if a nuclear clash should occur—and we fervently believe that it will not—in order to protect American cities and the cities of our allies during the wartime period, we shall continue to rely on reserving our assured destruction force and, through intrawar deterrence, to persuade any potential foe not to attack cities. It is our objective to prevent massive destruction even in the cataclysmic circumstances of nuclear war. There is no purpose to be served by massive destruction, which would eliminate the urban-industrial base of our own society, the society of the Soviet Union, and other societies. For that reason we have altered our targeting strategy, and we have discussed this at some length, in public.

I should like to emphasize that the alterations in our targeting strategy, which we believe make sense, are not so novel as perhaps has been advertised, because this has been discussed at least from the days of Secretary McNamara's Athens statement in 1962. The need for flexibility and selectivity has been alluded to in the posture statements of Secretary McNamara, Secretary Clifford, and Secretary Laird. We are, however, placing far greater emphasis than heretofore on options other than massive strikes at the cities of potential foes. And we hope that this would mean that even in the cataclysmic event of nuclear war, worldwide devastation could be avoided.

The assured destruction motion, Mr. Chairman, was not initially a strategy, and I am not sure it ever became a strategy. It was simply an analytical method of testing our own forces against a counterforce strike and a potential intercept by Soviet ABM capabilities during a period of time when the United States maintained paramountcy—overall numerical superiority—vis-a-vis the Soviet Union. These circumstances have now changed. And what may have been a reasonable way of testing and sizing our nuclear forces in the 1960's is now obsolescent. Therefore, we must design better ways of sizing our nuclear forces. At the same time, we must make clearer the way in which strategic nuclear forces would be employed in the event of a nuclear attack on the national interests of the United States. Such an attack would be so catastrophic that the President of the United States would make the agonizing decision to bring our strategic nuclear forces into play.

Let me stress, Mr. Chairman, that this would be the most agonizing decision that any President of the United States would ever have to make. We trust that no President will ever be forced to make such a decision. And one should understand that this is a decision that would not be lightly entered into by any man.

We recognize the cataclysmic effects of a recourse to nuclear weapons. We believe the Soviet Union also recognizes this, as would any future nuclear power of similar magnitude. Consequently, as long as we can rely upon the rationality of national leaders of all nations,

there is no danger, in my judgment, that that decision would be made lightly.

I have spoken, Mr. Chairman, of the targeting changes. With regard to the sizing of our nuclear forces, the existence of SALT gives us cause for hope. The U.S. Government strongly adheres to the protocol of the 1972 Moscow agreements, that neither side would attempt to achieve strategic advantage relative to the other side. We are hopeful that as a result of SALT II, which is now going on, we can have reductions in the strategic capabilities of both sides.

The sizing issue is one that has to be separated from the targeting issue. The targeting issue bears upon the effectiveness of our deterrence across the entire spectrum of risk. The sizing issue refers to the need for the United States to maintain essential equivalence in relation to the strategic forces of the other paramount power in the world.

We must have that essential equivalence, Mr. Chairman. Not only must we have a physical capability equivalent to that of the other superpower, but this equivalence must also be perceived by all parties around the world—not only by us because of what this perception does to our own will; not only to the Soviets as they perceive the military-political environment; but also to the Europeans, to the Japanese, to the Chinese, and to all other audiences who are vitally interested in the evolution of the worldwide military balance.

In the Non-Proliferation Treaty, Mr. Chairman, we and the Soviet Union pledged to help protect all countries around the world from nuclear war. This was done to encourage them to refrain from the acquisition of nuclear weapons. But if the U.S. strategic umbrella is perceived by audiences around the world to contain holes, then the temptation of other countries to acquire nuclear weapons will increase. As long as the United States maintains a strategic capability which is the equivalent of that of the Soviet Union, we think that it is reasonable for the Europeans, the Japanese and others to see that the United States offers adequate protection, thereby avoiding a scramble for additional nuclear weapons, which in the next century would have major unfavorable impacts on the security of the world.

In a classified session, Mr. Chairman, I shall go into recent developments with regard to the Soviet strategic forces. In this open session I can only say that the Soviet strategic program, insofar as its R. & D. activities are concerned, has had a depth and breadth that has been surprising to us. Its pace has been somewhat slower than we might have anticipated. Some would have anticipated the development of MIRVing capability by the Soviet Union prior to the summer of 1973. However, the Soviets do have in development four new ICBM's of very enhanced throw weight. And, they have in production now a new, long-range, submarine-launched ballistic missile. They also have a new submarine program in operation. We want to avoid undue alarm about these developments, Mr. Chairman, but we want to view them prudently. We cannot say where the Soviets will be going with these programs. We are not clairvoyant. But we do recognize that these programs, associated as they are with the numbers and throw weight implicit in SALT I, provide the Soviets with the potentiality of achieving strategic superiority vis-a-vis the United States

if we fail to take the necessary actions. We hope that the Soviets and ourselves will exhibit the appropriate degree of restraint and that limitations can be achieved through SALT II. But we cannot count on that. And for that reason we have a number of options in our program which enhance our R. & D. menu, options that the United States may embrace in the event the Soviet Union fails to exhibit the degree of restraint we hope for in the months ahead.

Mr. Chairman, in the long run, the critical variable with regard to ICBM's, is throw weight. Technological differences arise over time. Consequently, we have been concerned about the potentiality in the future—in the 1980's in particular—of the Soviets achieving major throw weight advantages. We have been satisfied with the numerical and throw weight handicaps of the United States under SALT I because we have had technological advantages. But the events of last summer indicate that those relative technological advantages are waning, and we must be prepared to offset any attempt by the Soviets to achieve real or apparent strategic advantages over the United States in the future.

In the past, Mr. Chairman, we have been concerned primarily about the throw weight embodied in the Soviet SS-9 ICBM and its follow-on, the SS-18. The throw weight in the SS-18 will be approximately 20 to 30 percent larger than that of the SS-9. We thought in the past that if we could deal with the throw weight embodied in the SS-9 and the SS-18 follow-on, we would have a handle through negotiations on the throw weight issue. We also thought that it was unwise for the Soviet Union to concentrate something on the order of 40 to 50 percent of their throw weight at a limited number of launch sites. In our view, this was destabilizing, not only for us but for them, and we thought that they would see the disadvantages in this. The situation has changed, however, as a result of the strategic programs of the Soviet Union, which have now become clear to us.

The SS-11 ICBM has been the mainstay of their force in the past. There are two follow-on missiles to the SS-11, the SS-17 and the SS-19. We are not surprised that they are planning to MIRV these new vehicles—we expected that. We are not surprised that they would have improved guidance as represented by on-board computers—we expect that. But what has been of special surprise is that these two follow-ons to a lightweight missile have throw weights which are two to three times the size of that of the SS-11. Consequently, we can no longer be confident that we can deal with the issue of throw weight simply by dealing with the SS-9 and the SS-18. We must now deal with the throw weight issue as a whole.

Mr. Chairman, I noticed during the President's state of the Union address to the Congress last week that his statement that the United States must never be the second best power in the world was the statement most enthusiastically applauded by the Congress. And, we shall be obligated to take the steps necessary to avoid circumstances in which the United States does become second best. That means grappling with the issue of throw weight, because the Soviet follow-on ICBM's could give them throw weight advantages in their ICBM force of approximately 5 to 1. This is a matter of concern to us in the Department, and I am sure it is a matter of concern to this committee.

As I have indicated, we are prepared to adhere to the objectives and the constraints as we see them, of the Moscow protocol of 1972. We are, therefore, introducing a number of options of our own that are lower cost and more constrained in a number of ways than some of our previous options. In particular, I should note that we are investigating a new SSBN using the propulsion system principle of the Narwhal attack submarine. We believe this would be a lower cost, 16-tube submarine that could be associated with the larger Trident in a mix to assure our future SLBM capabilities. We are prepared to go in either direction with our SSBN forces. Hopefully, the Soviet Union will show restraint with regard to some of these issues—throw weight in particular—and that as a consequence, it will not be necessary for the United States to go ahead with a vast Trident submarine program. Rather, it could be a more measured program.

However, if the Soviet Union fails to exercise restraint in Salt II, then our replacement programs for the entire Poseidon fleet will be in the direction of the large number of tubes, the large missiles and the heavy throw weight represented by the Trident class submarine. By contrast, we are prepared to replace the Poseidon fleet in part with the Narwhal class, with its lesser number of smaller tubes and smaller throw weight. There are advantages on both sides, but we must be prepared to maintain essential equivalence and this gives us the option of going in either direction. This is one option in a set of options that provide reassurance, I think, for those who are concerned about the perceived trend and the potentiality in Soviet weapons development. And it is a set of options that provide reassurance also to those who are concerned about both the growth in cost of our own strategic program and the desire for restraint.

We are prepared to follow in any direction. And, therefore, since arms control is a two-way street, we must recognize that at this stage of the game it will be the pace set by the Soviet Union that determines the size and composition of our strategic forces.

Mr. Chairman, as I have emphasized, the strategic forces provide a framework. We trust that we need not have recourse to the strategic forces and that the general purpose forces will be the ones of importance.

I know that there is disagreement with me in this committee with regard to our NATO commitments, and I can understand that. There is a restlessness, I think, with what is perceived to be a failure of the Europeans to do their share. And there is some basis for that restlessness.

But at the present time the Europeans do put up 80 percent of the ready forces of NATO, and this is one of the most important part of the worldwide balance. In our review of the commitments that the United States has entered into since 1945, we must be discriminating. I know there are many who feel that the United States entered indiscriminately into commitments after 1945, and that it is time for a review of those commitments. I agree that we must review our commitments discriminately. But, Mr. Chairman, the worst thing of all would be if the United States in reviewing commitments that some now perceive to have been entered into indiscriminately in the period after 1945, were to abandon commitments indiscriminately. This is so be-

cause many of those commitments are vital to the place and role of the United States in the world today.

We can retreat to the North American Continent and we can survive in the North American continent, but it would be a changed world, one in which many of the better aspects of the American society would be subject to strain. NATO is perhaps our most important commitment. The Europeans are doing more—I shall be happy to review this with the committee—and they should be doing more. But we must maintain a deterrent in Europe—particularly in Central Europe—that never allows temptation to the forces arrayed to the east of the Elbe River. I do not wish to ascribe motives, but as long as we have a balance nobody will be tempted.

I have discussed with our NATO friends what I call the NATO triad, which is different in concept from our strategic triad. It is based upon strategic forces primarily provided by the United States, tactical nuclear forces that would be available in the event that Western Europe started to be overrun, and a stalwart conventional capability. I believe that the Europeans now are more interested in that stalwart conventional capability than they have been since the inception of NATO in 1949. And that is vitally important, because the decision to use nuclear weapons will be an agonizing decision, not lightly entered into by anybody nor lightly concurred in by the NATO countries. In my judgment, we must, therefore, have a conventional capability in Central Europe to deter that component of the spectrum of risk.

We are moving in that direction. The European allies are strengthening their forces. There is much still to be done. But, if we are to deter effectively across the entire spectrum of risk and to provide Western Europe with the feeling that they have a stalwart capability, then the United States must continue to participate in European defense.

There are two motives for American forces being in Europe. One is the American presence. I believe that we will have to maintain an American presence. But a question that is quite rightly asked by members of this committee and by Members of Congress is, do we need 4½ divisions and 300,000 men in Europe in order to provide that American presence? It is quite correct to raise that question. If our purpose is only to keep an American presence in Europe, we can do it with less. But at the present time we have a rough balance between the conventional capabilities in the NATO guidelines area, between the NATO forces west of the Elbe and the Warsaw Pact forces east of the Elbe. Substantial reductions in the American contribution to that conventional capability would upset that balance. I recognize that there will be disagreement with this judgment, Mr. Chairman. But I believe that it is strongly in the American interest to continue to make that contribution as long as the allies do their share. And their share will be an increasing share.

Collaboration in this area is a two-way street. Just as we have to collaborate with the Soviets in regard to SALT and MBFR—we cannot unilaterally determine the outcome—so we must continue to collaborate with our European allies. We cannot do it alone. In the past, NATO, could rest its security on American nuclear superiority. That option is not open to us today. In the past, the United States repre-

sented 50 percent of the economic resources available in the world. We are down to something on the order of 30 percent today. The American public is not inclined to pick up the world burden unilaterally. We must have the collaboration of our allies, Mr. Chairman, and I believe we shall have that.

I invite you, Mr. Chairman, and members of the Armed Services and Appropriations Committees, to visit NATO this summer during the recess. NATO is so important an aspect of American foreign policy, as buttressed by American military capabilities, that we cannot, in my judgment, change our commitments there without a very careful review. Congress wishes to make a careful review, and I encourage all members of this committee to go to Europe and see for themselves what the Europeans are doing, and also to see the improvement of our own forces in Europe as compared to the heights—or the depths—of the Vietnamese war period.

We recognize also that this is a period in which the morale of the Western societies is not at its peak. And, therefore, it behooves us all to see what we can do to maintain that morale worldwide.

I have talked about the strategic balance and about the overall balance in NATO. I should now like to say a word about the naval balance, which also is relatively easy to quantify.

What has been, and what I think still should be called the Free World, is an ocean world. It depends upon the sea lanes for communication. We are asymmetrically dependent upon the oceans. And, in order to maintain a naval balance, we must have the assurance that commerce can reasonably travel the seas. We have, in the course of the last 4 budgetary years, reduced our naval forces from 979 ships to 526 ships today. During this same period of time, the Soviets have introduced a number of improved vessels into their navy. They have about 25 vessels with surface-to-surface missiles aboard which have powerful antiship capabilities. In addition, the Soviets are acquiring something of a blue-water navy. This is something of a change compared to the past, when the U.S. Navy was truly paramount on the world's oceans. I do not want to exaggerate the Soviet naval threat, nor do I subscribe to alarmist statements about the current superiority of the Soviet fleet. I simply want to lay the facts before you. One fact is that we must indeed retain a suitable naval balance. There are circumstances and there are places in the world where the U.S. Navy cannot go today with a high confidence of success. I think that this was built into the cards. We continue to have some edge in naval capability, but we should adjust our naval strength so as to maintain a worldwide balance with high confidence for the nations of the Free World, which are in a sense maritime states.

Mr. Chairman, I will now review briefly for you the major characteristics of the proposed Defense budget. We are up about \$7.6 billion in comparison to the President's initial request of last year. Allowing for the Israeli supplemental, it is up about \$5 billion. Or, compared to our current fiscal year 1974 request including the readiness supplemental, it is up about \$5.5 billion.

I offer, Mr. Chairman, no apologies for the size of our budget. It is less than 6 percent of our GNP. It is a shrinking share of our national expenditures. But \$92.6 billion of appropriations still is a sizable

amount. And we in the Department feel that we must justify that 6 percent to the American public. Unless we are able to justify it in terms of both the vision of America's role in the world—America's responsibilities—as well as in terms of the details of our force structure, you will be quite right to question it, Mr. Chairman.

I believe that this sum is necessary if the United States is to continue to fulfill its world responsibilities. I think that the budget is about right. I do not suggest for a moment that there is not some program that cannot be cut, nor that the budget is perfectly balanced. I am suggesting that the budget is of the right magnitude for this period of time.

TOA SUMMARY FY 1974 & FY 1975

(BILLIONS)

	<u>FY 1974</u>	<u>FY 1975</u>
ORIGINAL ESTIMATE	85.0	92.6
ISRAELI SUPPLEMENTAL	2.2	-
ADDED PAY COSTS, ETC.	4	-
ADJUSTED REQUEST	<u>87.6</u>	<u>92.6</u>
CONGRESSIONAL CUT	- 3.3	
STATUS AFTER CUT	<u>84.3</u>	
READINESS SUPPLEMENTAL	2.8	
CURRENT REQUEST	<u><u>87.1</u></u>	

INCLUDES \$3.4 BILLION FOR ANTICIPATED PAY INCREASE*

* INCLUDES \$2.2 BILLION FOR ANTICIPATED PAY INCREASE.

Mr. Chairman, this is the change that has occurred between fiscal year 1974 and 1975. And you note, the Congress cut about \$3.3 billion. The status after the cut and prior to the readiness supplemental that we are proposing was about \$84 billion. With that readiness supplemental it amounts to \$87 billion. The readiness supplemental for 1974 is less than the cut that the Congress imposed. We are prepared to live with that cut, but we did recognize that there were lessons that had been learned in the Middle Eastern war.

Senator SYMINGTON. Mr. Chairman, may I ask a question?

Mr. Secretary, how about the other supplements? How about the \$3.4 billion in pay, for example?

Secretary SCHLESINGER. The \$3.4 billion for anticipated pay increases was presented to this committee last year. That was included in the \$85 billion presented at that time by the Department of Defense. Due to a change of Office of Management and Budget procedures, rather than sending up those details and the detailed requests last year, it was sent up this year. I don't say whether that decision was right or wrong. But that \$3.4 billion in pay supplemental was given to this committee at that time, and it was printed, Senator Symington, in the President's budget. I shall be happy to provide that page of the 1974 budget for the record.

[The information follows:]

DEPARTMENT OF DEFENSE—MILITARY

Account and functional code		1972 enacted	1973 estimate	1974 estimate	Increase or decrease (—)
REVOLVING AND MANAGEMENT FUNDS					
Federal funds					
Intragovernmental funds:					
Army management fund.....051	O	1,300			
Navy management fund.....051	O	6,299	940	7,976	7,036
Air Force management fund.....051	O	—357	5,000	620	—4,380
Total Federal funds revolving and management funds.		—223,370	—707,915	—605,565	102,350
ALLOWANCES					
Federal funds					
General and special funds:					
Civilian and military pay raises.....051	BA		1,780,000	1,2,885,000	2,165,000
	O		1,710,000	1,2,680,000	1,970,000
All-volunteer force.....051	BA			2,150,000	150,000
	O			2,140,000	140,000
Military retirement systems reform.....051	BA			2,390,000	390,000
	O			2,370,000	370,000
Total Federal funds allowances.....	BA		780,000	3,425,000	2,645,000
	O		710,000	3,190,000	2,480,000
TRUST FUNDS					
Miscellaneous trust funds: Permanent, indefinite	BA	6,621	6,730	6,643	—87
	O	7,181	6,515	6,465	—50
Miscellaneous trust revolving funds.....051	O	—1,538	3,000	1,300	—1,700
Total trust funds.....	BA	6,621	6,730	6,643	—87
	O	5,643	9,515	7,765	—1,750
SUMMARY					
Federal funds:					
(As shown in detail above).....	BA	75,190,584	77,908,647	83,575,623	5,666,976
	O	75,257,744	74,301,585	78,293,635	3,992,050
Deductions for offsetting receipts: Proprietary receipts from the public.....051	BA	—106,596	—104,800	—95,100	9,700
	O				
Total Federal funds.....	BA	75,083,988	77,803,847	83,480,523	5,676,676
	O	75,151,148	74,196,785	78,198,535	4,001,750

¹ Proposed for later transmittal under existing legislation.

² Proposed for later transmittal under proposed legislation.

The CHAIRMAN. Proceed, if you will.

Secretary SCHLESINGER. I think that Senator Symington would like to come back to that either now or later.

Department of Defense Budget, fiscal year 1974 supplementals

[In millions of dollars]

Purpose

Force readiness:	
Fuel price increase.....	480
Middle east payback.....	231
Augmented force readiness.....	1,397
Increased airlift capability.....	169
Accelerated modernization.....	516
Strategic program changes.....	25
Total	2,818
Military and civilian pay increases:	
Jan. 1, 1973.....	1,495
Oct. 1, 1973.....	1,060
Total	2,555
Retired pay cost of living increase:	
July 1, 1973.....	287
Jan. 1, 1974.....	182
Total	469
Wage board pay increases.....	236
Basic allowance for subsistence.....	107
Postal costs.....	48
Total	6,233

Title

Military personnel.....	2,000
Retired pay.....	469
Operation and maintenance.....	1,742
Procurement.....	1,772
Research, dev., test and evaluation.....	217
Military construction.....	29
Family housing.....	4
Total	6,233

Component

Army.....	1,872
Navy.....	1,866
Air Force.....	1,918
Defense agencies.....	104
Defense-wide.....	473
Total	6,233

Secretary SCHLESINGER. Mr. Chairman, the readiness supplemental to which we have referred for some period of time is indicated at the top of this chart, and amounts to \$2.8 billion approximately. As I have underscored, this represents, in large part, the lessons that we believe we have learned from the Middle East war. The first item, I would say, is a consequence. We have noted that fuel has gone up in price substantially, and that even with our reduced level of fuel consumption we cannot live with the budget that we received last year for this year. We need to have relief with regard to the new costs of fuel. And, depending on how fuel prices settle out, there is some uncer-

tainty in what is the ideal sum in that area. That is relief that we will need to have without question in fiscal year 1974.

In regard to the Middle East "payback," as I have mentioned to you before, Mr. Chairman, and to other members of this committee, the Department of Defense supplied armaments to Israel in accordance with the purchase price of those armaments. We have taken them out of inventory, which we have drawn down substantially. We are now in the position of having to replace those items in the inventories. We have discovered that the acquisition price today is substantially greater than the acquisition price at which these items were initially acquired, and that "payback" item represents the difference between the replacement cost to us now and the price that the U.S. Government charged to Israel for these equipments.

That "payback," Mr. Chairman, is another short term item which we need to order these equipments for inventory replacement. I think if we go over these equipments in detail you will see that they are required in our inventories and that this is an immediately necessary and desirable item.

The third item of about \$1.4 billion represents the true lessons, as it were, of the Middle East conflict. We have discovered that our inventories were low in certain categories of weapons, in particular in those classes of modern munitions that were most effective during the Middle East war—Maverick, Tow, Hobo, and Shrike, for example. These are munitions that were highly effective, and we learned more about their effectiveness during the course of the war. We also recognized how low our inventories were. I shall discuss that with you in more detail in a classified session.

These are items that are necessary for the readiness posture of the U.S. We must have them now, and I would be reluctant to see the committee postpone this item until fiscal year 1975.

Overall as a nation, we have been inclined to pay more attention to force structure, base structure and support structure, and even to modernization, than we have to the readiness of forces. But we must have more than forces with a large and perhaps even generous base structure to support the shrunken force structure of today. Our forces must also be ready. And that means that their inventories must be filled and ready for combat. Munitions must be available and the forces must be equipped. During the Middle East war, we discovered major weaknesses in our inventories of tanks, modern munitions, and some of our more traditional munitions. These are items, Mr. Chairman, that are essential for any modern defense establishment. If I may summarize with regard to the fiscal year 1974 supplemental and the fiscal year 1975 budget, we have not asked, save in this one area, for any increase in force structure. And, as I have indicated, we are phasing out our air defense capabilities, save those necessary to control the air space of the United States in a conventional role.

We do believe, Mr. Chairman, that our force structure should be ready to fight, and that its inventory should be filled. Except for one-third of a division for the Army, we have not asked for any increase in force structure. In fact, our manpower request has shrunk somewhat. I shall get into that. But we must have appropriate readiness

if American policymakers are to have real options. Therefore, we must balance our forces so that their readiness reflects their inherent capabilities.

To the extent that we have increases in our budget above the normal pay and inflation factors, they fall in the area of readiness and in the area of R&D options. Aside from that, by and large, this budget simply is a continuation of the trend that existed previously.

You will also be interested in the management of the resources of this Department. As I said before, I have no apology to make with regard to the size of this budget. However, we can manage our resources more effectively and we are attempting to do so. To the extent that we are successful, we can take this either in the form of improved capability or in the form of reduced expenditures in constant dollars.

It is my judgment, Mr. Chairman, that we are now at the moment on the general purpose forces side when we must maintain those options other than suicide or surrender, and part of our management task is to convert, not swords into plowshares, but fat into swords. And we are proceeding to do so. We are having some important headquarters changes and reductions in the Army, which is taking the lead in this area.

You have written to us, Mr. Chairman, about the reduction of our headquarters and command structure. Senator Symington reviewed our budget for fiscal year 1974, and in the report that he carried to the floor, he included objections to the existing headquarters and command structure. We do not necessarily agree, Senator Symington, in detail with every objection that you raised, but we agree with the overall thrust of that report, which was that we need to review our headquarters and command structure. We are in the process of reviewing it, and we expect to have some major changes by next summer.

As I have indicated, the Army is making changes in this area. We plan to take the resources in the Army that result from a reduction in headquarters and convert them into additional combat capability, which is the direction that this committee would like us to follow. We are taking the reduction in the Army component of our air defense capabilities and converting these resources into additional general purpose capability.

ARMY HEADQUARTERS ELIMINATIONS

U.S. Army, Alaska.
U.S. Army Forces, Southern Command.
U.S. Army, Pacific.
Tascom, Europe.
Engineer Command, Europe.
ARADCOM.
U.S. Army Intelligence Command.

You have been briefed, Mr. Chairman, and the committee will be briefed later, by General Abrams with regard to changes that the Army is planning with respect to a reduction in command headquarters. This will include the telescoping of several commands, the elimination of six command structures, and a shrinkage of their headquarters here in Washington from 9,000 people to approximately 6,000 people. This is an area in which this committee has expressed particu-

lar interest. And I am happy to say we are going to be particularly responsive in that area.

But in view of the overall thinness of our general purpose forces, we must, I think, Mr. Chairman, be prepared to transform the resources saved as a result of these adjustments into the additional combat capability that is necessary.

The only place in our budget that we have indicated an increase in the force structure is the increase in the Army from 13 to 13½ divisions. We are hopeful, Mr. Chairman, that by the end of the forthcoming fiscal year we will have 14 divisions through a further reallocation of resources. And, looking farther out into the future, we are hopeful that we will begin to increase even further both the number and the combat capability of those divisions. This is the direction that the Congress and this committee have been urging upon the Department for many years, and the Department is delighted to respond to the suggestion.

We recognize however, that our manpower strength is going to be circumscribed. We are down 20,000 men on a one-for-one basis between officers and enlisted personnel. We are prepared to go even further with regard to the reduction of officer strength if the Congress will give us the necessary legislation. But there is an end to the road in the process that we have been following in recent years, which is to dump out reservists—good reservists frequently—in order to retain regulars who are not as capable as are the reservists on active duty.

In equity to these people, they must have appropriate compensation as they depart from the service; and in addition, we must have the tools by which we can reduce appropriately the officer-enlisted ratio. This committee has expressed its views in that area. We agree with the committee. But we ask, will the committee and the Congress help us with regard to the necessary tools for the further adjustment of the officer-enlisted ratio?

I have already spoken about readiness and the importance of having a balanced force. I have spoken to some extent about R. & D. And I will say further that I do not regard the start of a R. & D. project as in any way implying that that R. & D. project must be carried through to acquisition and deployment.

We are further emphasizing the milestone approach in our R. & D. Even a successful technological development does not necessarily mean that we should procure it for the force structure.

R. & D. provides a menu of options that enables the United States to respond in the event that the strategic environment changes in a way that we cannot predict with high confidence in advance. But if the strategic environment does not require it, then we ought not to acquire some or all of these options for the force structure. What we seek to obtain is austere, low-cost developments which provide us with a menu of options which may or may not be deployed.

Finally, Mr. Chairman, as you have observed in your opening statement, there was major modernization during the Vietnamese War period, and we are enjoying the fruits of that modernization today. But it does imply block obsolescence around 1980 of some of our forces—the F-4s, for example, that we acquired in the later sixties. The

Air Force and the Navy are facing block obsolescence in some of those capabilities, about which we would be delighted to talk to you in depth. It is not an immediate problem. But I call this to your attention because in the later part of the decade we will be forced to deal with block obsolescence for some of our air capabilities in the same way as we are forced today to deal with the block obsolescence of the naval vessels that we acquired 30 years ago during the second world war.

Thank you, Mr. Chairman, I hope that it has been worthwhile for you. The committee has been generous with its attention.

Thank you very much.

[Prepared statement and posture statements follow:]

Mr. Chairman and Members of the committee, it is my privilege to present to you the FY 1975 Defense program and budget. This is the first budget in a decade or more that does not provide for the support of U.S. forces in combat. At the same time, it is a budget that must carry us, through maintenance of a military equilibrium, on the passage from the cold war toward a period of enduring peace. In such a difficult period of transition, I have a special duty to review with you the fundamental strategic issues that we face and the basis on which we are developing what we consider to be our minimum peacetime defense and deterrence posture.

As in the past, the Chairman of the Joint Chiefs of Staff, Admiral Thomas H. Moorer, will give you his report on our military posture. He will discuss in more detail than I shall here the current and developing balance of military power.

I. THE INTERNATIONAL SITUATION AND THE DEFENSE ESTABLISHMENT

The first issue we must face in our planning is how, at any given time, the international situation should affect the shape of the U.S. defense establishment. It is a well-worn truism that our forces exist to support our foreign policy, but what operationally does that mean? Are there specific elements in the external world that create the need for military capabilities, overseas deployments, military assistance, and continuing programs of research and development? When and how should changes in the international situation justify alterations in the size and composition of our force structure?

As you know, a number of factors external to the United States directly affect our planning. I shall review them only briefly here.

1. *Interests.*—The divisions brought on by our involvement in Southeast Asia have left an understandable desire on the part of many Americans for some respite from foreign troubles and responsibilities. But recent events in the Middle East have sharply reminded us that the United States still has very large and important moral, political, and economic interests outside its borders, and that these interests may require military protection. Recent events have also underlined the extent to which distant troubles can effect and even jeopardize the United States itself unless our defenses are strong.

2. *Opposing Capabilities.*—It is no secret that, in the past, certain nations have shown themselves hostile to the worldwide interests of the United States and have acquired the military capabilities to threaten them—and us. We live in the constant knowledge that the Soviet Union, at any time, could launch a nuclear attack—large or small—on the United States itself, and that the Peoples' Republic of China (PRC) could well develop at least a modest capability for such an attack during the next decade.

It is generally agreed that some relationship must exist between these threatening capabilities and the defense posture of the United States. Indeed, we consider it fundamental that at all times we must have available a sufficiency of ready strategic offensive forces to retaliate against a Soviet nuclear attack.

The Soviet Union, its partners in the Warsaw Pact, and the PRC also maintain large and ready general purpose forces. These forces are in fact the most usable elements of their considerable and diversified power. It is noteworthy, however, that many Americans do not insist on a comparable availability and readiness for U.S. and allied general purpose forces, and even suggest that in a period of nuclear parity we should reduce them below their current levels.

It would be economically intolerable, inefficient and certainly undesirable for the United States by itself to develop a force structure that mirrors this entire range—the Soviet Union, the Warsaw Pact, the PRC—of potential threats. In any event, the Soviet Union is the only other superpower in the international political arena. Accordingly, it is primarily in light of Soviet capabilities that we must judge the adequacy of our own nuclear and non-nuclear deterrent forces.

3. *Commitments, Contingencies, and Objectives.*—Another factor shaping our overall defense posture is the large number of formal commitments for mutual defense that the United States has accumulated since World War II. Not counting the collective security provisions of the United Nations Charter, we are allied to more than 40 nations in nine multilateral and bilateral treaties. In addition, we have informal but nonetheless real commitments to other nations that our defense programs must take into account.

These commitments are important to both our nuclear and our non-nuclear force planning. In varying degrees they reflect an obligation to maintain military capabilities in support of our allies. They give us insights about the types of contingencies that could arise and about the threats that require deterrence. They also enable us to share the burden of collective security with a number of other nations. In some instances they lead us to provide military assistance as a substitute for the maintenance of additional U.S. forces and their deployment abroad.

Above all, when worldwide equilibrium and orderly change constitute basic U.S. objectives, commitments and contingencies tell us where points of potential pressure exist and where, for purposes of deterrence, specific balances of military power must be maintained. On that score, I believe that we must keep a visible strategic nuclear balance, contribute to a number of regional balances—in Europe and Asia—and help to ensure the freedom of the seas, as has been the long tradition of the United States.

II. PLANNING THE FORCES

In light of these factors, we can arrive at the specific nuclear and non-nuclear forces required for a particular contingency. But those factors do not automatically dictate what overall force structure the United States should maintain in this period of transition. Not only does the final calculus depend on a number of additional considerations, including various perceptions of the key military balances, it also turns on our assessment of the international environment and the degree of menace that it poses to our essential interests.

All through the previous decade—quite apart from our special buildup for Southeast Asia—my predecessors interpreted these factors to mean that we should maintain active and reserve forces (nuclear and non-nuclear) sufficient to deter hostilities by:

- Giving us counterforce and damage-limiting options, as well as the ability to retaliate with devastating power against cities, even after a surprise nuclear attack by the USSR;

- Coping simultaneously with two major contingencies (one in Europe and one in Asia) and one minor contingency;

- Maintaining superiority in a war at sea and control the sea lines of communication necessary to the support of our forces and allies overseas.

Admittedly the assessment of the international situation during that decade was more pessimistic than our current estimate. But it also is noteworthy that the large active forces then at our disposal were intended in most contingencies, to operate in conjunction with allies and to receive early reinforcement from our reserves and the draft. Indeed, despite a peacetime military establishment of 2.7 million men and women, we added another 900,000 (starting in 1965) both to strengthen our forces in Southeast Asia and to maintain our capability to deal with other contingencies. Only in 1969, with the advent of this Administration, did a significant reduction in the force begin to take place.

III. THE CURRENT FORCES AND THEIR COSTS

Since that time, estimates of the international situation have become more optimistic, in large measure because of initiatives taken by the United States. To the extent that we now consider the political environment less threatening, it is largely because President Nixon terminated the U.S. military involvement in

Vietnam, made successful diplomatic overtures to Peking and Moscow, achieved agreements in the Strategic Arms Limitation Talks (with the Anti-ballistic Missile Treaty and the Interim Offensive Agreement), and began the negotiations on mutual force reductions in Central Europe. As you know, U.S. force levels have declined substantially in the wake of these initiatives.

The results are shown in the attached table. Not only has the general purpose force structure now fallen well below the peak levels of 1968, it is actually smaller than it was in 1964. In other words, we maintain a much more modest defense establishment in 1974 than was considered necessary in peacetime only a decade ago. It is equally noteworthy, however, that the considerations which affect our defense planning are no less demanding. The sheer physical threats, as measured by the military capabilities of potential adversaries, have actually increased during the last ten years. At the same time, so have our foreign interests, with expanded external investments, a larger volume of international trade, and growing dependence on raw materials from sources overseas. Meanwhile, our political commitments remain essentially constant, as do the capabilities of our allies.

To underline these developments, and particularly the decline in the U.S. defense posture, is not to imply disapproval of previous initiatives, although some of the force cuts may have gone too deep. Nor is it to pretend that, in real terms, we now have a small defense budget as a result of the reductions in our force structure. It is true, of course, that defense outlays are consuming a decreasing fraction of our gross national product (now less than 6%) and federal revenues. It is also true that in constant FY 1975 prices, we are spending \$8 billion less than in FY 1964, the last pre-Vietnam budget year. Nevertheless, by any measure, \$85.8 billion is a large outlay. The nation should understand, however, that the total looks so large—and is so large—compared with the \$50.8 billion we were paying for defense in FY 1964 primarily because of four factors:

In fiscal year 1975

[In billions of current dollars]

The remaining costs of Southeast Asia-related support.....	1.8
The increase in military retired pay since fiscal year 1964.....	4.8
The growth in military and civil service pay and allowances since fiscal year 1964.....	21.1
The effects of inflation on the purchase of goods and services since fiscal year 1964.....	14.4
Total cost growth.....	42.1

Were it not for these factors, we would be maintaining our baseline force structure—the posture we design for long-term, steady-state, peacetime purposes—for about \$43.7 billion. However, inflation and real pay increases (not cost-of-living increases) granted prior to the end of the draft have been substantial since 1964.

Because our society decided on grounds of equity to make military and civil service pay comparable to remuneration in the private sector of the economy, the bill for defense has gone up by a large amount. Despite the resulting burden, I doubt that we would want to reverse earlier decisions and implicitly tax our military personnel for service to the country—with or without the draft. Instead, I believe we will want to accept the fact that, because of truly national decisions in favor of equity—shared in by the executive and legislative branches alike—a unit of defense is now more expensive than it was ten years ago. Whether we can bring these unit costs down, and whether we should consider reviving the draft at some future date, are separable issues that I shall discuss later in more detail.

IV. THE BASELINE REQUIREMENT

Because defense spending appears so high compared with the past, and because the international environment is less hostile, we have faced and will continue to undergo pressures to reduce our defense posture still further, to cut back unilaterally on our strategic offensive forces, and to thin out our baseline deployments overseas. Despite these pressures, I believe that we have already overshot the mark in previous reductions, and that, to the extent that we can expand the combat structure (particularly where the general purpose forces are concerned) without adding real costs, we should be authorized to do so. I have several grounds for this view.

This is the first peacetime defense budget in many years. Nevertheless, I would be remiss if I pretended that our need for military strength is substantially less than it was a decade ago, before our major deployments to Southeast Asia. It is true that our relationships with the USSR and the PRC have improved since then; Sino-Soviet differences are more visible; and we no longer think it so important to insure against simultaneous conflicts in Europe and Asia. But, as I have already indicated, the military capabilities of those nations in a position to threaten our interests have not declined, they have increased. There is, in fact, no evidence whatsoever that unilateral reductions induce reciprocity on their part. Considering the cuts we have already made, further reductions should now be dependent upon international agreement with potential adversaries. And, with SALT and MBFR, we have created the mechanisms for just such hoped-for reductions. While we await their results, growth in the force structure brought about by increased military efficiency should not be denied us, especially since estimates of our baseline requirements are not precise to the last detail.

As I hardly need remind you, to move from a state of cold war through a condition of detente and improved diplomatic communication to an era of greater mutual trust and cooperation between East and West is an involved and lengthy process. It is particularly difficult when our negotiating partners in the enterprise are closed societies. As recent events in the Middle East have demonstrated, tests of will and resolution may be with us for some time to come, and military strength appropriately displayed will play a meaningful role in their resolution.

Furthermore, unlike the role circumstances and disposition allowed us to play prior to World War II, we now unavoidably have the leading part in the defense arrangements of the free world. There is no substitute among the other industrialized democracies for the power of the United States. Whereas prior to World War II the United States could serve as the arsenal of democracy and its great reserve force, now we constitute democracy's first line of defense. There is no longer any large and friendly shield of defenses behind which we can take two or more years to mobilize our forces. It is our own ready defenses that constitute so much of the deterrent shield.

Nor is that all. We must also recognize that large and abrupt changes in our posture and deployments could well produce major effects in the world—not only on the calculations of the USSR and the PRC, but also on the perspectives of our allies and on such long-term trends as nuclear proliferation. We are not the policeman of the world, but we are the backbone of free world collective security.

To summarize, this is not only the first defense budget of the post-Vietnam era; it is also the first defense budget for what President Eisenhower once called the long haul. Short of a sudden and dramatic improvement in the international environment, this means that we must provide offsetting power to the multiple capabilities of potential foes. Deterrence must operate across the entire spectrum of possible contingencies; we cannot afford gaps in its coverage that might invite probes and tests. As far ahead as we can see, a triad of strategic nuclear, tactical nuclear and conventional forces will be required.

In such circumstances, the force structure we propose for FY 1975 and the years that follow must rest on the concepts and methods that I have alluded to here. That is to say, U.S. interests, the potential threats to them, our commitments, the range of contingencies that might arise, allied capabilities, and our conception of the role we should play in world affairs, must continue to shape the defense posture and budget of the United States.

V. RESOURCES AND PROGRAMS: FISCAL YEAR 1974 SUPPLEMENTAL AND FISCAL YEAR 1975 BUDGET

The President's budget proposal you received on 4 February was developed within this overall context, and includes requests for both FY 1974 Supplementals—the result of pay and price increases and necessary readiness improvements—and the FY 1975 budget.

The *fiscal year 1974 Supplemental* requests total \$6.2 billion in addition to the amounts already appropriated by the Congress, raising the proposed FY 1974 Total Obligation Authority (TOA) to \$87.1 billion. Of this Supplemental amount, \$3.4 billion is required for pay and rate increases. The balance of \$2.8 billion is required to maintain the desired readiness level of U.S. forces.

This "readiness supplemental" is largely the result of our recent Middle East experiences and includes fuel price increases in the amount of \$480 million. Also included are the extra costs of our arms supply to Israel, consisting of increased operations and maintenance costs and the additional costs for replacing in U.S. inventories the material provided to Israel. These extra costs amount to \$231 million.

The Supplemental request also reflects the most urgent deficiencies in the condition of our forces that were made apparent by the Middle East hostilities. With these things in mind, I have included \$1,397 million to improve the readiness of our forces, \$169 million to increase our airlift capability, and \$516 million to buy certain high-value weapons and equipment which are now in short supply in our Services.

The readiness improvements include adding to our ammunition stocks, reducing the maintenance backlog on our ships and equipment, making sure prepositioned equipment is ready for use, improving our defense suppression capabilities, and purchasing short-supply items important for overall readiness.

The airlift improvements I recommend are modest first steps in a more fundamental examination of our airlift capabilities which I believe is necessary. These first steps include buying additional C-5 and C-141 spare parts, developing a stretched version of the C-141, and examining the possibilities for relatively inexpensive improvements to civil airlift to permit them to carry military cargoes in an emergency.

The FY 1975 budget request in TOA is \$92.6 billion, an increase of \$5.5 billion over FY 1974, and outlays for FY 1975 are estimated at \$85.8 billion. This request is a substantial one, but I offer no apologies for it. It bears directly on whether or not the United States will continue to fulfill the responsibilities it has around the world. In real terms, moreover, it means doing no more than holding our own as compared to FY 1974, for the \$5.5 billion increase is wholly consumed by pay and price increases. In fact, the FY 1975 budget in constant dollars is smaller than the FY 1964 budget of a decade ago. Similarly, the FY 1975 budget outlays continue for the second year to claim less than six percent of the gross national product—the lowest allocation of resources to Defense since FY 1950—and continue also the declining trend of Defense spending as a percent of the total federal budget, at 27.2 percent for FY 1975.

We do propose in the FY 1975 budget certain new emphases which are meant to insure that we have the ability to maintain in the future a worldwide equilibrium of military force. This requires that there be a stable balance of strategic forces, of general purpose forces—particularly in central Europe—and of maritime forces. With this in mind, the FY 1975 program reflects these significant trends in our forces:

We will continue to maintain the triad of ICBM, SLBM and bombers in our strategic forces, improving them and replacing them as appropriate, within the confines of the SALT I agreements.

We will proceed with several strategic systems research and development programs which might serve either as replacements for existing allowed systems or as hedges against the uncertain results of SALT II.

We will decrease our active Air Defense of the continental United States, reducing the number of air defense fighter squadrons and SAM batteries. Without an effective antimissile defense, precluded to both the U.S. and USSR by the ABM Treaty of 1972, a defense against Soviet bombers is of little practical value. We will, however, retain the capability to protect the sovereignty of our airspace and to defend against limited threats.

We will continue improvements in our strategic command and control systems. In our general purpose force structure, we will halt, and in some areas reverse, the steady reductions that have occurred since 1968.

We will increase the number of active Army divisions, from 13 to 13½, add new battalions to existing understrength divisions, and convert certain infantry units into armored and mechanized units. We will do this within manpower authorizations, by making reductions in headquarters and support establishments.

For the first time in many years, we will be adding more new ships to the fleet than we will be retiring from the fleet, thus reversing the trend that brought us from 979 general purpose ships in 1968 to 526 ships at the end of FY 1974.

We will apply the lessons of the recent Middle East war, by giving high priority to programs such as modern antitank weapons; tanks; air defense of land forces

and its opposite, defense suppression; improved munitions and more substantial stocks, aircraft shelters, and the like.

We will improve our readiness by accelerating aircraft modifications and reworks, restoring ship overhaul schedules, and other maintenance.

We will increase our total airlift and sealift capability, as far as possible through the use of existing resources, commercial as well as military, Allied as well as our own, in order to be able to deploy divisions even more rapidly to Europe in an emergency.

Chief procurement programs for strategic forces involve continuation of production of Minuteman III missiles at the minimum rate, completing SSBN conversion to Poseidon, and the continuation of the TRIDENT SSBN and air-launched missile programs. In addition, there are several research and development programs underway as replacements for existing systems allowed under SALT I or as hedges against the uncertainty of SALT II and the lapsing of the Interim Agreement. These R&D initiatives include continued development of the B-1, Advanced ICBM technology, the cruise missiles, advanced ballistic missile re-entry systems and technology (ABRES), and a new, smaller SSBN. No production decisions on these systems have been taken or are required this year. In addition we will complete deployment of SAFEGUARD at Grand Forks, and continue our ABM technology development. We will not go ahead with antiballistic missile defense of the national capital area at the present time. Despite the enormous importance of strategic programs, TOA for FY 1975 comes to \$7.6 billion, or only 8.4 percent of the total budget, as compared to a TOA in 1964 of \$8.5 billion (16.7 percent of the budget).

The major land force procurement and development programs involve tank/antitank, air defense, surface-to-surface missiles and mobility systems. The principal procurement programs are the M60 tanks and TOW and DRAGON antitank missiles on an accelerated schedule, the SEA-COBRA and COBRA-TOW attack helicopters, the improved HAWK surface-to-air missile system, and the Pershing and Lance surface-to-surface missile systems. The major development programs are for a new main battle tank, a mechanized infantry combat vehicle, an advanced attack helicopter, testing of alternative mobile, short range air defense systems, and the continued development of a tactical transport and heavy lift helicopter.

In order to maintain naval forces of adequate size and capabilities for the future, in the face of obvious budgetary limitations, we are giving great emphasis in our FY 1975 programs to the high/low mix concept for our surface fleet. Accordingly, we look to the Sea Control Ship and Patrol Frigate to take on tasks in lower threat areas previously undertaken by aircraft carriers and destroyers. We are also continuing in 1975 our emphasis on ASW capabilities, on acquiring an antiship missile (the HARPOON), and in pursuing new technology for the 1980's. The chief procurement programs are a continuation of the DD-963 destroyer programs, and the DLGN-38 nuclear frigates; the design and procurement of the Sea Control Ship, the patrol frigate, carrier and land-based ASW aircraft and helicopters, antiship missiles, attack submarines, amphibious assault ships, and a number of supporting systems. For the longer term, we are exploring surface effect technology and its implication for our surface fleet.

Tactical air forces programs this year reflect the application of the high/low mix concept. Major procurement programs include the F-14A and F-15 which will replace a portion of the long-service, F-4 tactical fighter. There will also be more of the latest versions of several Navy attack aircraft—the A-4M, A-6E and A-7E. We have included in the FY 1975 budget the initial procurement funds for the A-10 close air support aircraft, and development funds for new light-weight fighters, both examples of low cost but capable systems tailored to particular missions against limited threats. We also include funds for the initial procurement of 12 tactical AWACS airborne warning and control aircraft which are expected to improve in significant measure our ability to control tactical air operations and to provide long range airborne surveillance and warning for our tactical air forces. Finally, we are giving greater emphasis in our FY 1975 procurement and development programs to systems that will locate, identify and suppress ground air defenses. In this regard, we will continue procurement of the EA-6B tactical jamming aircraft as well as a number of new development efforts.

We are not proposing new procurement programs for our mobility forces in FY 1975. Instead, we propose to make our existing forces more ready and capable

of more extensive operations, by higher crew ratio and more certain availability of spare parts and the like. We also propose to modify all of the existing C-141 cargo aircraft to increase their capacity by about 30 percent. We are studying ways to identify and mobilize necessary shipping early in a crisis.

We are working with our Allies to insure greater cooperation and availability of Allied sealift resources in an emergency. We are also proposing in the FY 1975 budget to modify civilian aircraft in cooperation with U.S. commercial airlines in order that they might have the necessary capacity to meet the military cargoes requirements and be available in time of need. This, of course, is a much less expensive alternative than buying and maintaining our own larger airlift fleets. Our overall aim, underlined by the Middle East hostilities, is to improve substantially our strategic airlift capacity to deploy forces overseas swiftly in time of crisis.

VI. PERSONNEL FOR DEFENSE

One side, and traditionally the less publicized side, of the Defense programs are the weapon systems and equipment programs I just discussed. The other and now more costly side is manpower. In FY 1975 we are aiming to maintain a peacetime deterrent force structure of sufficient size, quality and readiness by using our manpower more efficiently with particular emphasis on getting more combat capability by reducing headquarters and support structure. And we will continue programs to improve the quality of life in the military services.

These are formidable tasks. First, our force structure is much smaller than it has been in more than two decades, and smaller by almost 40 percent from the 1968 Vietnam peak. We cannot prudently allow it to shrink further. Moreover, we must take steps to increase our readiness and to continue to overcome nagging deficiencies. Second, FY 1975 will complete the transition to the All Volunteer Force; and, despite our smaller active force, we still must recruit one of every three eligible and available men to man the force adequately. We will increase also recruiting of young women. Attracting and retaining a sufficient number of qualified individuals will perhaps be our most significant personnel test in FY 1975. We obviously will have to use our personnel resources more efficiently.

Third, we must improve the organization and readiness of the Reserve and National Guard so that they can assume their increasingly important role in our total security posture. And finally, we must do all of this at as low a cost as is possible, since manpower already consumes approximately 55 percent of the Defense Budget and further increases would jeopardize both needed improvement in readiness and weapons development programs. It is clear not only that the best efforts of the Defense Department will be required to succeed, but also that we must have the active support of the Congress and the American people as well.

Doing our best to make the volunteer force work is one of our highest priorities. At the end of the first full year of operation of the volunteer concept, the Department of Defense is within one percent of required end strength. The Army, which requires the largest numbers of men is three percent short of its end strength and has recently been meeting its monthly recruiting objectives. This is a favorable development, but obviously one which will bear continuing close scrutiny, especially in light of the requirement recently imposed by the Congress that at least 82 percent of all new enlistees be of average or above average mental ability and that at least 55 percent be high school graduates. Although the overall record for DOD this fiscal year has been 89 percent with respect to mental ability and 66 percent for high school graduates, it is expected that the high school graduate requirement will cause us some problems in meeting Army and Marine Corps recruitment goals. Given the uncertainty of the impact of this requirement, we are presently projecting a shortfall of between 10,000 and 20,000 in Army end strength at the end of this fiscal year. This would represent a 1.3 percent to 2.6 percent shortfall in Army end strength, a tolerable shortage.

I cannot say yet, despite the encouraging signs of the moment, whether the volunteer force ultimately will work. But it is far too early to entertain thoughts about returning to a system of conscription. Moreover, while cost is not the only factor in deciding between the volunteer force and the draft, I would caution that the cost savings associated with a return to the draft appear to be minimal unless the Congress unexpectedly alters the rule of comparability in

military pay, a rule which was made on its own merits and which predates the decision to pursue a volunteer force.

VII. NEW DIRECTIONS

Looking ahead, I already have directed the addition of more deterrent options than we have previously had available for our strategic nuclear forces, and such modifications in targeting doctrine as might be necessary to achieve them. In an era of nuclear parity, we cannot and should not rely primarily on the threat of massive replies to deter the great variety of contingencies that could arise in a nuclear crisis. Our current force structure is such as to permit much greater flexibility in our contingency planning without any erosion of our assured destruction reserve.

But I stress that each step we take in the strategic field is designed to bolster deterrence, which remains the cornerstone of our strategic philosophy.

However, as I also have indicated, the size and character of our strategic nuclear forces could change significantly, depending on the outcome of SALT. We cannot now know the outcome of those negotiations; however, and therefore I am proposing a number of research and development programs which would enable us to respond in kind in order to maintain the delicate balance of deterrence, should the Soviets decide to deploy a more efficient counterforce capability than they now deploy. We would prefer, of course, that neither side take this step. Instead, we would rather see the strategic forces reduced by mutual agreement. But we are determined to preserve an essential strategic equilibrium with the USSR both in capabilities and in targeting options.

I also am devoting considerable time and attention to NATO and to the future of our general purpose forces there. My purpose has been to begin a process aimed at achieving, over the next three years, two fundamental security objectives necessary to sustain an adequate defense posture:

First, the construction of a satisfactory basis for maintaining an adequate overall NATO security posture for the long haul, including balanced forces with rational missions credible to our adversaries and ourselves.

Second, an equitable adjustment of burdens to put United States participation in NATO, and the United States military presence in Europe, on a solid, durable foundation acceptable to both the United States Congress and public, and to our Allies.

I believe we will be successful on both points.

Also, in our general purpose forces, we are aiming to reduce the support structure and strengthen our combat forces wherever possible. I believe we can make reasonable gains here without any sacrifice in essential command and support functions. I already have noted the additional Army units being raised in this way during this fiscal year. To make this program work, however, we must allow the Army, within its budget, the incentive of retaining the increased capability that it obtains by trading in support for more combat forces.

We have now had sufficient experience with our strategic airlift to demonstrate its high utility both in standard contingencies and in the more "off-design" cases for which we do not specifically buy forces. Furthermore, at an appropriate time in the future, strategic airlift will enable us to increase our CONUS-based strategic reserve without any reduction in our support for forward defense in key areas of commitment. Strengthening the strategic reserve, in turn, will mean fewer forces tied to specific theaters and greater flexibility in their allocation during a crisis. We will be looking for opportunities to increase our airlift capability, and have included some of our ideas in the current budget.

Deputy Secretary of Defense William P. Clements and I are pursuing the "fly-before-buy" and "Hi-Lo" policies initiated by Secretaries Laird and Packard to see whether we cannot further drive down unit costs on our more sophisticated weapons and at the same time substitute quantity for quality in a number of areas. In many situations, large numbers of relatively uncomplicated systems may prove more effective than equal-cost but much smaller numbers of highly complex delivery vehicles. As yet, however, I cannot give you a final recommendation on the precise mix of high and low technologies that we should have in such mission areas as interdiction and close air support, field army defense, and sea control. We do have a number of programs already underway, such as the A-10, the Patrol Frigate and the Sea Control Ship, which I believe are proceeding in the right direction.

In general, as we deal with these and other specific problems in our adjustment to a long haul posture, there are five basic principles which, in my view, should guide the future conduct of this department. They are that:

The safety of the United States, its citizens, and their lawful pursuits continues to depend on the maintenance of a strong defense establishment. Accordingly, we who represent this department must not be reticent in stating the needs we have or the pride we feel in the performance of the duties for our nation.

We have the responsibility, not only to the United States itself but also to our friends throughout the world, to assure the military balance so necessary to deterrence and a more enduring peace. Other nations led in that responsibility for most of the first two centuries of our national existence; now the cloak of leadership unavoidably embraces, us, and we must make the long-term effort to bear it.

The men and women of the Department of Defense are without peers as servants of the nation. It does not follow, however, that patriotism can proceed without respect. We must give them the respect, dignity and support that are their due. Equal opportunity will continue to be a DOD watchword.

To stress our needs is not to ignore an equal obligation, to use our citizens' resources wisely. We must continue to improve the efficiency and effectiveness of our forces and to add to the arsenal of deterrence.

We can and must become increasingly competitive with potential adversaries in a more fundamental sense. We must not be forced out of the market—on land, at sea, or in the air. Eli Whitney belongs to us, not to our competitors. He, rather than the medieval craftsmen of Mont St. Michael and Chartres—however magnificent and unique their art—must once more become our model.

I cannot say at this juncture exactly what the long haul holds for this Department. But I can say that unless we are to plan only by intuition we must continue to build our peace structure on the hard facts of the international environment rather than on gossamer hopes for the imminent perfectability of mankind.

FISCAL YEAR 1975 DEPARTMENT OF DEFENSE BUDGET
SUMMARY OF SELECTED ACTIVE MILITARY FORCES

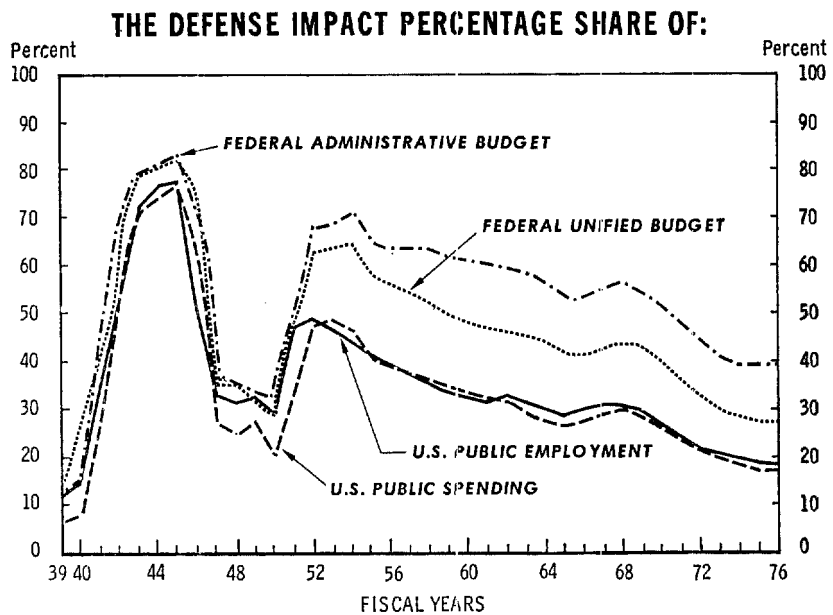
	Actual		Estimated	
	June 30, 1964	June 30, 1973	June 30, 1974	June 30, 1975
Strategic Forces:				
Intercontinental ballistic missiles:				
Minuteman.....	600	1,000	1,000	1,000
Titan II.....	108	54	54	54
Polaris-Poseidon missiles.....	336	656	656	656
Strategic bomber squadrons.....	78	30	28	27
Manned fighter interceptor squadrons.....	40	7	7	6
Army Air defense firing batteries.....	107	21	21	0
General purpose forces:				
Land forces:				
Army divisions.....	15 ¹ / ₂	13	13	13 ¹ / ₂
Marine Corps divisions.....	3	3	3	3
Tactical air forces:				
Air Force wings.....	21	22	22	22
Navy attack wings.....	15	14	14	14
Marine Corps wings.....	3	3	3	3
Naval forces:				
Attack and antisubmarine carriers.....	24	16	14	15
Nuclear attack submarines.....	19	60	61	67
Other warships.....	368	242	186	191
Amphibious assault ships.....	133	66	65	65
Airlift and sealift forces:				
Strategic airlift squadrons:				
C-5A.....	0	4	4	4
C-141.....	0	13	13	13
Troopships, cargo ships, and tankers.....	100	53	32	32

¹ Reflects reorganization; total number of strategic bombers remains unchanged from fiscal year 1974.

[For supplemental request chart see p. 18.]

ARMY ELIMINATIONS

- **U.S. ARMY, ALASKA**
- **U.S. ARMY FORCES, SOUTHERN CMD**
- **U.S. ARMY, PACIFIC**
- **TASCOM, EUROPE**
- **ENGINEER CMD., EUROPE**
- **ARADCOM**
- **U.S. ARMY INTELLIGENCE CMD.**

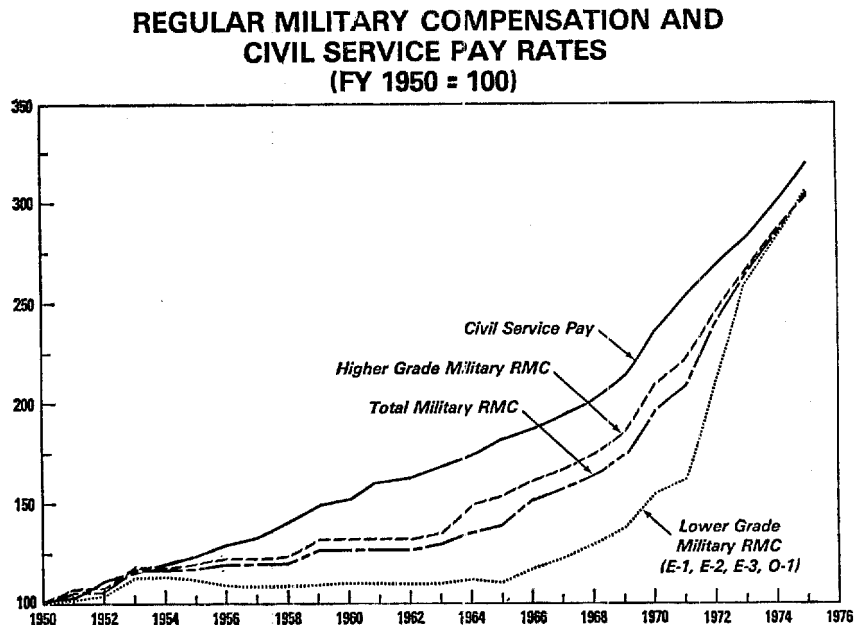
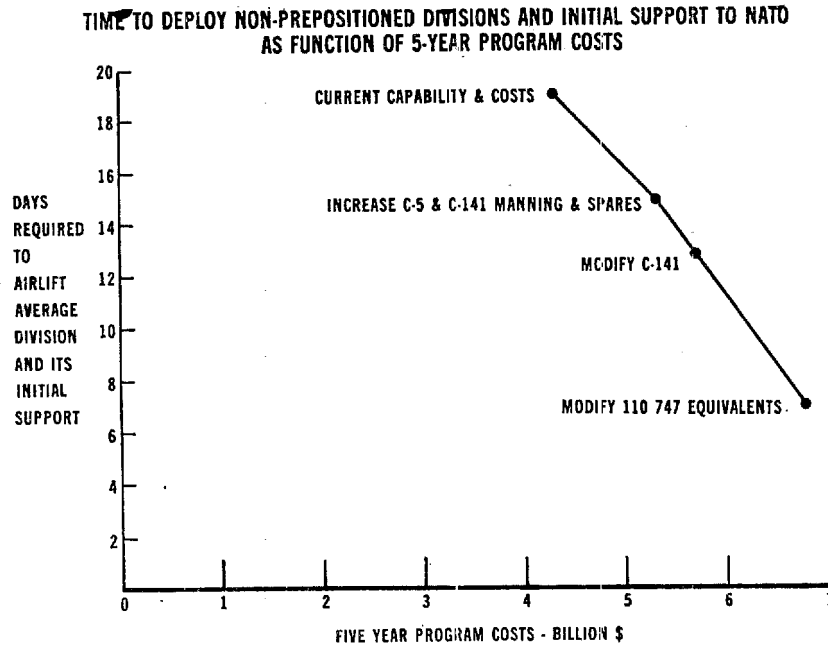


TOA SUMMARY FY 1974 & FY 1975 (BILLIONS)

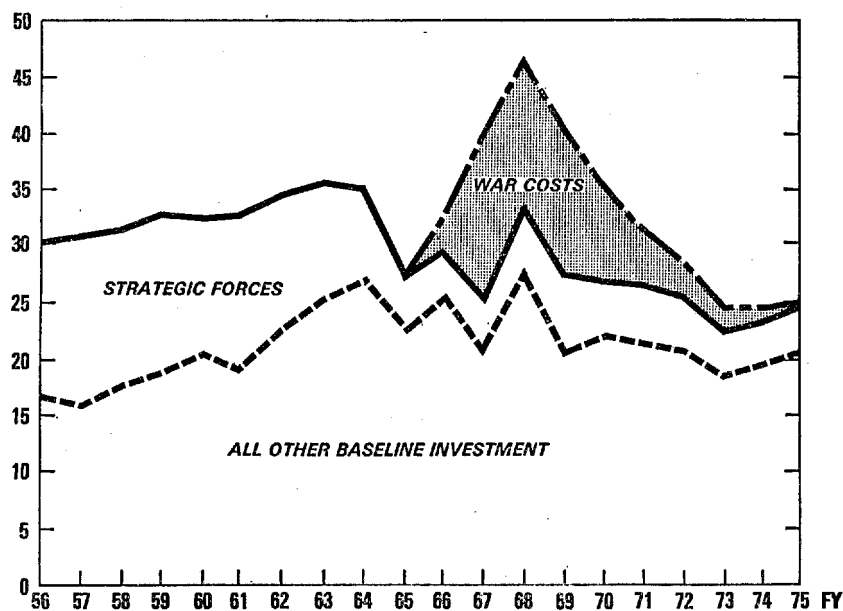
	<u>FY 1974</u>	<u>FY 1975</u>
ORIGINAL ESTIMATE	85.0 *	92.6 **
ISRAELI SUPPLEMENTAL	+ 2.2	-
ADDED PAY COSTS, ETC.	+ .4	-
ADJUSTED REQUEST	<u>87.6</u>	<u>92.6</u>
CONGRESSIONAL CUT	- 3.3	
STATUS AFTER CUT	<u>84.3</u>	
READINESS SUPPLEMENTAL	+ 2.8	
CURRENT REQUEST	<u><u>87.1</u></u>	

* INCLUDES \$3.4 BILLION FOR ANTICIPATED PAY INCREASES.

** INCLUDES \$2.2 BILLION FOR ANTICIPATED PAY INCREASES.



INVESTMENT OUTLAYS IN CONSTANT (FY 1975) PRICES

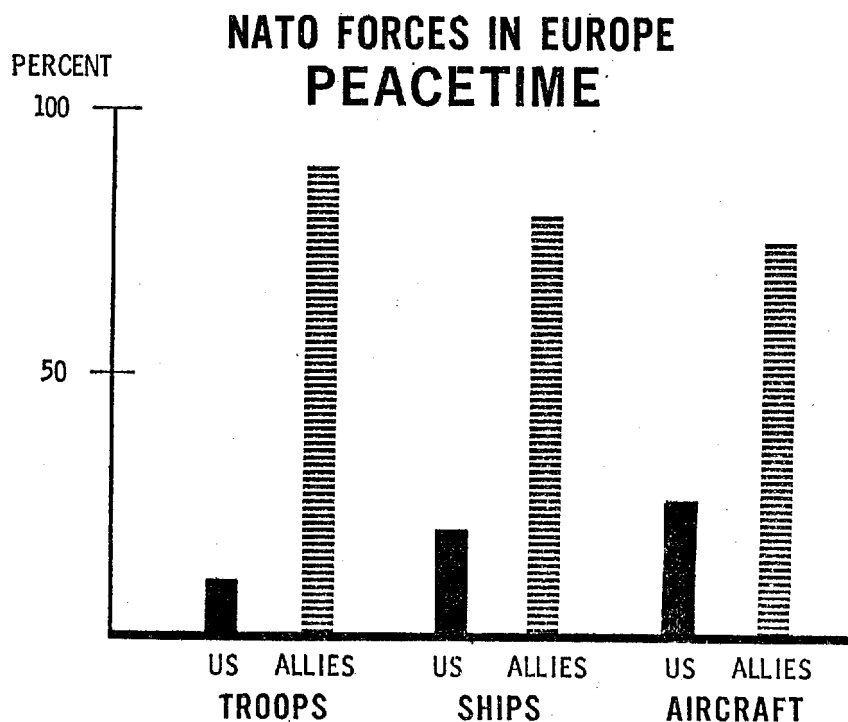


DOD MILITARY AND MAP
FY 1984 PROGRAM AT FY 1975 PRICES
(OUTLAYS, \$MILLIONS)

	<u>ACTUAL FY 1964 OUTLAYS</u>	<u>PAY RAISES AND PRICE INCREASES</u>	<u>COST AT FY 1975 PRICES</u>
MILITARY BASIC PAY	\$ 8,511	178.3%	\$23,689
MILITARY ALLOWANCES	4,475	62.1%	7,254
CIVIL SERVICE PAY	7,305	84.3%	13,462
PURCHASES	<u>29,286</u>	<u>59.9%</u>	<u>46,830</u>
SUBTOTAL, EXCLUDING RETIRED PAY	49,577	84.0%	91,235
RETIRED PAY	<u>1,209</u>	<u>95.3%</u>	<u>2,362</u>
TOTAL	<u>50,786</u>	<u>84.3%</u>	<u>93,597</u>
REDUCTION IN PROGRAM EXCLUDING RETIRED PAY: \$11,446			
FY 1975 DEFENSE BUDGET, EXCLUDING RETIRED PAY			\$79,789
RETIRED PAY			6,011
TOTAL FY 1975 DEFENSE BUDGET			\$85,800

DEPARTMENT OF DEFENSE BUDGET
FINANCIAL SUMMARY
(BILLIONS OF \$)

MILITARY PROGRAM	FY 1964	FY 1968	CURRENT DOLLARS TOTAL OBLIGATIONAL AUTHORITY	
			FY 1974	FY 1975
Strategic Forces	8.5	7.2	6.9	7.6
General Purpose Forces	16.4	30.4	27.9	29.2
Intelligence & Communications	4.4	5.5	5.9	6.5
Airlift & Sealift	1.0	1.8	1.0	1.0
Guard & Reserve Forces	1.8	2.2	4.4	4.8
Research & Development	4.8	4.3	7.0	8.4
Central Supply & Maintenance	4.6	8.4	8.9	9.3
Training, Med. & Gen. Pers. Activ.	7.0	12.2	18.2	20.1
Administration	1.1	1.2	1.8	2.2
Support of Other Nations	1.1	2.4	5.1	3.5
Total	50.7	75.6	87.1	92.6



SECRETARY OF DEFENSE JAMES R. SCHLESINGER, ANNUAL DEFENSE DEPARTMENT
REPORT, FISCAL YEAR 1975

Mr. Chairman and members of the committee, it is my privilege to present to you the FY 1975 Defense Program and Budget. This is the first budget in a decade or more that does not include support of United States forces in combat. At the same time, it is a budget that must carry us, through maintenance of a military equilibrium, on the passage from the cold war toward a period of enduring peace. In such a difficult period of transition, I have a special duty to review with you the fundamental strategic issues that we face and the basis on which we are developing what we consider to be the lowest prudent peacetime defense posture.

Admiral Thomas H. Moorer, the Chairman of the Joint Chiefs of Staff, will present his customary report on our military posture. He will discuss in more detail than I shall here the current and developing balance of military power.

A. THE INTERNATIONAL SITUATION AND THE DEFENSE ESTABLISHMENT

Our defense budget proposals, of necessity, reflect our perspective on the United States role in the world. It is understandable, of course, that there will be divergencies in judgment among Americans on that role, and those divergencies will be reflected in different estimates of what the defense budget should be. As the Psalmist tells us, "Where there is no vision the people perish." Hence, I would like to share with you our vision.

The United States today, as opposed to the period before 1945, bears the principal burden of maintaining the worldwide military equilibrium which is the foundation for the security and the survival of the Free World. This is not a role we have welcomed; it is a role that historical necessity has thrust upon us. The burden of responsibility has fallen on the United States, and there is nobody else to pick up the torch if the United States fails to carry it.

In fulfilling this responsibility we recognize that we are dealing in a world which is militarily dominated by two states—ours and the Soviet Union. There is no other nation that possesses a military capability comparable to these two states. Consequently, in judging the military balance, and in deciding upon our own force posture, we do so primarily with the Soviet Union in mind.

This does not suggest that we are not hopeful with regard to the future peaceful evolution of world politics; quite the contrary. Considerable progress has been made during the last five years in improving the international political climate. The President has taken many important initiatives: opening up new lines of communication with the Soviet Union and with the Peoples' Republic of China, helping to settle long-standing disagreements between East and West such as Berlin, beginning in practical ways to put limits on armaments, and ending our military involvement in the hostilities in Indochina. There has been a new spirit of cooperation between East and West, reflected in these practical arrangements, that offers the possibility—as yet it is no more than that—of a more durable peace in the future. And as you know, United States force levels have declined substantially in the wake of these Presidential initiatives, and the share of our national resources committed to defense has been significantly reduced.

Neither am I suggesting that the difficulties in the international situation imply that there will be an unconstrained arms race or frequent confrontations between East and West. It is precisely to avoid these circumstances, and to put boundaries around arms competition, that we are engaged with the Soviet Union in SALT II. And it is to achieve a similar objective, through a more stable balance at lower force levels in Central Europe, that we and our NATO Allies are engaged in negotiations on Mutual and Balanced Force Reductions with the Warsaw Pact states.

While we pursue negotiations about mutual reductions of arms, in furtherance of detente, it is my judgment that we must maintain a worldwide military equilibrium. Short of that, we create the possibility of vacuums and temptations that could undermine detente and the hope for improved political relations with the East.

A policy requiring us to maintain our military strength and alliances while we are actively pursuing detente with the Soviet Union and the People's Republic of China may appear to some as incongruous. We have a long tradition in this country of arming with great haste when war comes upon us, and disarming with

even greater haste when the war is over; and we have tended, often, to view our relations with other nations in terms of absolutes—friend or foe, ally or adversary, cold war or detente.

Unfortunately, the real world is more complicated. Today, I hardly need argue that a feast and famine approach to national defense is no longer feasible, let alone desirable. Our experience in this century has amply demonstrated that satiating our military establishment in wartime and starving it in peacetime brings us neither peace nor long-term alleviation of the heavy burden of defense. In both blood and treasure, it will cost us less to maintain a reasonably stable level of defense effort until it is possible to achieve genuine mutual reductions in armaments.

The Soviet Union shows that it, at least, sees no inconsistency between detente and increasing military capabilities. We see continuing increases in Soviet budgets, forces and forward deployments. The Soviet Union is making significant improvements in its strategic nuclear forces and, in concert with its partners in the Warsaw Pact, maintains large and ready general purpose forces. These forces are, in fact, the most usable elements of their considerable and diversified military power. We would serve ourselves and our Allies poorly indeed if we relied solely on fond hopes or soft words while failing to take practical account of improving Soviet capabilities.

The Soviet Union has historically been a relatively prudent and sober power and I trust it will continue to be so. I hope that as a result of our mutual recognition that there is no good alternative to peaceful cooperation, we shall gradually achieve a world in which security is based upon something more than a balance of arms. But until such a time arrives we must recognize the need for a stable balance of military forces. As a minimum, we must keep a visible strategic nuclear balance, contribute to a balance of general purpose forces in central Europe where the bulk of Soviet and Warsaw Pact forces are arrayed against NATO, and together with our Allies maintain a balance of naval forces to ensure the freedom of the seas and the protection of our sea lines of communication, as has been the long tradition of the United States.

1. *The Strategic Nuclear Balance.*—There have been two aspects in the development of Soviet strategic forces, one long-term and the other more recent, that affect our present strategic forces planning and the deterrent value of our strategic systems. The long-term and quite well known factor is that over many years the Soviets have been steadily closing the gap in nuclear capabilities between them and us.

For a period of time prior to 1960 the United States had a virtual nuclear monopoly. By 1960 it was perceived that our monopoly advantage would ebb; and, in fact, it not only began to ebb, but by 1966-67 the Soviet Union had a very substantial intercontinental counter deterrent. During the early 1960's it was stated quite clearly by President Kennedy—and also by a large majority of Americans in both parties—that the United States needed alternatives other than suicide or surrender, that it needed options which did not imply immediate escalation to major nuclear war.

If anything, the need for options other than suicide or surrender, and other than escalation to all out nuclear war, is more important for us today than it was in 1960, because of the growth of the capabilities possessed by other powers. These additional options do not include the option of a disarming first strike. Neither the USSR nor the United States has, or can hope to have, a capability to launch a disarming first strike against the other, since each of us possesses, and will possess for the foreseeable future, a devastating second-strike capability against the other. This almost certainly will deter the deliberate initiation of a nuclear attack against cities, for it would bring inevitable retaliatory destruction to the initiator. Thus, this basic deterrent remains intact.

A development of more recent years is the accelerated improvement in Soviet missile technology. The Soviet Union now has the capability in its missile forces to undertake selective attacks against targets other than cities. This poses for us an obligation, if we are to ensure the credibility of our strategic deterrent, to be certain that we have a comparable capability in our strategic systems and in our targeting doctrine, and to be certain that the USSR has no misunderstanding on this point.

It is true that in addition to retaliatory targeting against urban and industrial centers, our war plans have always included military targets. The purpose of

having war plans whose dimensions are generally understood by potential foes is, first, to deter rash actions. But secondly, if deterrence fails, the war plans provide the National Command Authorities—the President and his advisers—with well thought-out, detailed sets of options.

In the past, most of those options—whether the principal targets were cities, industrial facilities, or military installations—have involved relatively massive responses. Rather than massive options, we now want to provide the President with a wider set of much more selective targeting options. Through possession of such a visible capability, we hope to reinforce deterrence by removing the temptation for an adversary to consider any kind of nuclear attack. Therefore, the changes we are making in our strategic planning this year are specifically intended to shore up deterrence across the entire spectrum of risk. We believe that by improving deterrence across the broad spectrum, we will reduce to an even lower point the probability of a nuclear clash between ourselves and other major powers.

But if, for whatever reason, deterrence should fail, we want to have the planning flexibility to be able to respond selectively to the attack in such a way as to (1) limit the chances of uncontrolled escalation, and (2) hit meaningful targets with a sufficient accuracy-yield combination to destroy only the intended target and to avoid widespread collateral damage. If a nuclear clash should occur—and we fervently believe that it will not—in order to protect American cities and the cities of our allies, we shall rely into the wartime period upon reserving our “assured destruction” force and persuading, through intrawar deterrence, any potential foe not to attack cities. It is through these means that we hope to prevent massive destruction even in the cataclysmic circumstances of nuclear war.

This adjustment in strategic policy does not imply major new strategic weapon systems and expenditures. We are simply ensuring that in our doctrine, our plans, and our command and control we have—and are seen to have—the selectivity and flexibility to respond to aggression in an appropriate manner. We do not intend that the Soviet Union should have a wider range of options than we do.

Even after these adjustments to our present policy, there remains a serious potential problem for the future of our strategic policy and forces. In recent years, the USSR has been pursuing a vigorous strategic R&D program. This we had expected. But its breadth, depth, and momentum as now revealed comes as something of a surprise to us.

During the past year alone, the Soviets have tested four new ICBM's (the SS-X-16, SS-X-17, SS-X-18, and SS-X-19), and have developed their first MRV-submarine-launched missile. The ICBM's are of especial interest. Three of the four have been flown with MIRV's, and all of them are being designed for increased accuracy. The very large SS-X-18 will have about thirty percent more throw-weight than the currently deployed SS-9. The SS-X-17 and SS-X-19 are considered as successors to the relatively light SS-11. They will have from three-to-five times the throw-weight of the earlier model SS-11's, which now constitute the bulk of the Soviet ICBM force. If all three new and heavier missiles are deployed, Soviet throw-weight in their ICBM force will increase from the current 6-7 million pounds to an impressive 10-12 million pounds.

This throw-weight, combined with increased accuracy and MIRV's, could give the Soviets on the order of 7,000 one-to-two megaton warheads in their ICBM force alone. They would then possess a major one-sided counterforce capability against the United States ICBM force. This is impermissible from our point of view. There must be essential equivalence between the strategic forces of the United States and the USSR—an equivalence perceived not only by ourselves, but by the Soviet Union and third audiences as well. This was the essence of the SALT I agreements.

With these things in mind, we are seeking in SALT II to ensure that the principle of essential equivalence is upheld. We are also proposing in the FY 1975 budget several strategic R&D programs conducted within the SALT I agreements as hedges against the unknown outcome of SALT II and the uncertain actions of the USSR. The United States is prepared to reduce, stay level, or if need be, increase our level of strategic arms, but in any case that level will be fixed by the actions of the Soviet Union. If the Soviet Union insists on moving ahead with a new set of strategic capabilities, we will be forced to match them. We would prefer, however, to reduce the present balance in such a way that strategic

equivalence can be achieved at the lowest cost and least destabilizing level of forces.

2. The NATO-Warsaw Pact Balance.—

There are some who feel that the United States entered indiscriminately into security commitments in the post-World War II period, and that it is time to review those commitments. I agree that we ought to review our commitments. But the worst thing of all would be if the United States, in reviewing commitments now believed by some to have been entered into indiscriminately in an earlier period, were to abandon these commitments indiscriminately—because many of those commitments are vital to our security, and to the place and role of the United States in the world today. We can retreat to the North American continent, and we can perhaps survive there indefinitely. But it would be a changed world, and one in which many of the better aspects of the American society would be increasingly subject to strain.

NATO is perhaps our most important commitment. I hardly need remind this Committee of the fundamental ties between the United States and Europe, or to recall for you all we have done in this century to help ensure European freedom and vitality. Nor need I tell you that American and European interests in the larger issues of mankind are indivisible. It is for these larger reasons, as well as our own immediate national interests, that we have worked so hard, over so many years, under so many Administrations, both Democratic and Republican, to establish a solid foundation for Western security, and to help ensure political stability and economic well-being.

As far as I am aware, there is no fundamental disagreement with these basic assumptions of our European policy. It is instead on certain manifestations of that policy about which there is disagreement—whether the NATO conventional forces are adequate for deterrence and defense, and whether the United States is bearing a disproportionate share of the collective defense burden of the Alliance.

It is precisely to these two aspects of our NATO policy that I have devoted so much attention in my discussions with the NATO Defense Ministers. My purpose has been to begin a process aimed at achieving over the next three years two fundamental security objectives necessary to sustain an adequate defense posture:

First, the construction of a satisfactory basis for maintaining an adequate overall NATO security posture for the long haul, including balanced forces with rational missions credible to our adversaries and ourselves.

Second, an equitable adjustment of burdens to put United States participation in NATO, and the United States military presence in Europe, on a solid, durable foundation acceptable both to the United States Congress and public, and to our Allies.

The objective of NATO strategy is deterrence, and the forces we field to achieve deterrence are both nuclear and conventional forces. The role of these forces has changed over time. In NATO's early days, the United States enjoyed a clear superiority in nuclear forces. This allowed early NATO strategy to be based on the "tripwire" concept, by which conventional ground forces in Europe were designed to serve primarily to trigger nuclear retaliation by the United States against a Warsaw Pact attack.

Now, as the Soviet Union reaches nuclear parity with the United States, deterrence will be strongly reinforced if there is a balance of conventional as well as of nuclear forces. This clearly does not mean that we no longer require a nuclear deterrent. Nor does it mean that the American nuclear commitment to the security of the Alliance has been outdated. The commitment is firm. But it does mean that our nuclear forces may no longer carry the same dominant weight in the balance of deterrence that they did in an earlier period, and this places a higher value on NATO's conventional military capabilities. Thus a strong conventional capability is more than ever necessary—not because we wish to wage conventional war but because we do not wish to wage any war.

I have discussed with our NATO Allies what I call the "NATO triad", which is different in concept from our strategic triad. It is based upon strategic forces primarily provided by the United States, tactical nuclear forces that would be available in the event that Western Europe started to be overrun, and a stalwart conventional capability. I believe that the European Allies are aware of the implications of nuclear parity, and are now more interested in a stalwart conventional capability than they have been since the inception of NATO in 1949. This new perception is vitally important because the decision to use nuclear weapons

will be an agonizing decision not lightly entered into by anybody nor lightly concurred in by the member nations of NATO.

While many agree with the need and importance of conventional forces, there is controversy over the balance of military forces between NATO and the Warsaw Pact. It has sometimes been suggested that NATO does not have, and cannot afford to acquire, a conventional option which does more than serve as a trip-wire for nuclear war. I disagree. Our analysis suggests that NATO has the essential ingredients for such a balance. If the NATO countries do not falter in their defense programs, and if we can concert our defense efforts more effectively, there is no reason why NATO should not be able to achieve and sustain an adequate defense posture for the long haul.

NATO has fielded a large military force of high quality. It is a force of considerable strength. It continues to improve. In many respects it is not the equal of the Warsaw Pact force opposing it—for instance, in maneuver divisions and tanks. NATO's main reinforcements, those from the United States, are not so close as those of the Soviet Union. But NATO has some strengths of its own, such as tactical air forces, and the Warsaw Pact has some weaknesses and vulnerabilities, such as logistics and the uncertain reliability of some Pact members. NATO could give a good account of itself in defense, provided NATO gives itself the defensive weapons and military cohesion it needs. Of course, NATO is dependent on each member keeping up its individual efforts. All must do their fair share if the present disparities between NATO strength and that of the Warsaw Pact are not to become insuperable.

This realistic and positive assessment of NATO's conventional defense capabilities does not mean the existing correlation of forces between NATO and the Warsaw Pact is satisfactory for our security. While NATO does have substantial conventional defense capabilities—and it is important that the Soviet Union realize this—there remain objective disparities, and any Mutual and Balanced Force Reduction agreement must address these disparities if it is to enhance stability.

The second major objective I have pursued with our European Allies is the achievement of an equitable adjustment of the defense burden. In fairness, we should acknowledge at the outset that NATO defense has been far from a single-handed effort by the United States. Of the peacetime forces deployed in the European area, our allies contribute approximately 90 percent of NATO's ground forces, 80 percent of the ships, and 75 percent of the aircraft. In the critical central region of Europe, the United States contributes only 23 percent of NATO's manpower—compared, for example, with the Soviet Union's share of 46 percent of Warsaw Pact manpower.

I am confident, from my meetings with the Defense Ministers, that the Allies do appreciate the need to achieve a more equitable sharing of the defense burdens. In fact, they have been moving in this direction for the past several years, as evidenced by the real increases in their defense budgets—increases that have occurred notwithstanding the process of détente, and at a time when our own defense budget and forces have shown substantial real reductions. I am hopeful that allied defense budgets will continue to increase overall during the next few years, although the present economic prospects in some countries are discouraging.

The Allies are of course also aware of the present Congressional requirement that full offset of the United States balance of payments deficit on defense account in FY 1974 be obtained and that compensatory reductions in United States forces stationed in Europe as part of our NATO commitment be made if offset arrangements are inadequate. I believe, although I cannot at this time promise, that offset arrangements with the Federal Republic of Germany and with our other Allies will fulfill the requirement of the law without requiring unilateral redeployments of United States forces from Europe. These arrangements will make an important contribution to the burden sharing objective we seek.

I do not intend, however, to rest our burden sharing objective on the Defense balance of payments account. The balance of payments accounts are only one indicator of the respective burdens being borne by each Ally. What we seek, as I have mentioned, is an adjustment of general burdens which will put United States participation in NATO, and the United States military presence in Europe, on a more solid footing.

But after a more equitable sharing of the defense burden, there is, frankly, no satisfactory alternative in the near term to the continued presence in Europe of substantial numbers of United States forces. Reductions in United States

forces in Europe would be prudent only through successful negotiation with the Warsaw Pact. While we are seeking greater efficiencies in the use of our forces, and are working with our Allies to achieve a more efficient and effective allocation of our collective resources, early improvements of this nature are not likely to permit unilateral United States force reductions so long as the Warsaw Pact continues to improve its capabilities.

The Mutual and Balanced Force Reduction negotiations do hold out a real prospect for reductions. It is not a certain prospect, for we do not seek reductions at any cost, but only reductions that contribute to security in Europe. We and our NATO Allies have put forward proposals which would achieve both a more stable balance and reduced levels of forces and we hope progress can be made. Neither purpose would be served by mechanical reductions yielding a precarious correlation of forces. Both are served by the approach to negotiations being taken by us and our Allies.

3. *U.S.-USSR Naval Balance.*—The third area in which we and our Allies want to maintain a perceived balance with the Soviet Union (and its allies) is in the forces that can be employed at sea. As a maritime nation, dependent upon the sea for the vitality of our economy and for mutual support with our Allies, the sea is more important to us than to the Soviet Union. Therefore, a balance at sea implies more than a strict numerical balance, for together with our Allies we would need to protect a minimum essential level of shipping against a sustained interdiction effort by the Soviet Union and its allies.

Historically, Soviet Navy planning has emphasized force to support its land campaigns by interdicting the opponents' navies, and thereby interrupting the projection of opposing power by sea. Soviet forces have therefore stressed small surface combatants, many submarines, antiship cruise missiles, a large patrol vessel force particularly suited to coastal defense, and naval long-range and medium bombers.

In the past ten years, however, we have seen a growing deployment of Soviet naval forces to distant waters. The Soviet Navy began continuous out-of-area deployments in 1964 in the Mediterranean; these deployments were expanded later to the Indian Ocean, the Caribbean, and the west coast of Africa. The overall level of Soviet deployment activity measured in ship-days increased roughly six-fold from 1965 to 1970. There has been some leveling off since 1970, but we anticipate a modest increase in Soviet sea-going activities in the future. ("Ship-days" measure only activity, of course, and not direct combat capability.)

The Soviet Navy, contrary to some opinion, is not presently growing in numbers. It is growing in capability. The Soviet Navy has a vigorous ship-building program to replace older combatant ships with new, more capable types. By 1979 the Soviet Union could have several aircraft carriers of the KURIL-class, the first of which is now approaching operational status. We expect their major surface combatants to continue for the next several years at a level of about 200 ships, nearly the same as the United States now has. We are seeing a decline in the overall size of the Soviet submarine force, as they retire older diesel ships at a greater than one-for-one rate as new nuclear submarines come into the fleet. Even so, we estimate that by the early 1980s the USSR will have approximately twice the planned United States submarine level. This relatively large Soviet submarine force will continue to pose the primary threat to our sea lanes throughout the decade.

In sum, as we look ahead we see a Soviet Navy that is becoming increasingly capable of overseas deployment, whose submarines could pose a significant threat to free world shipping, and whose surface combatants, with their considerable antiship cruise missile capability, could inflict serious damage on our naval forces in a surprise attack. Admiral Moorer will discuss the naval situation in greater detail.

United States naval forces have been improving in quality since the 1950s. Increased emphasis has been given to protection of sea lanes of communication as a hedge against the possibility of a Soviet campaign against military and economic resupply shipping. Major ASW development programs have been carried out, providing a good surveillance and warning capability and a good capability to counter the Soviet submarine threat in a sustained conflict. Despite these improved capabilities, the numerical size of the Soviet submarine force indicates it could be a significant threat to shipping and naval forces during the early stages of any major conflict.

Numerically, the United States Navy has been declining steadily in recent years, and indeed has been reduced by about 45 percent since 1969. This reduction primarily reflects the retirement of many aging World War II-construction ships, including some early retirements which were made to provide funds for future procurement. Our carrier forces are declining from a total of 26 in 1962 to a projected 15 in 1975. (Because our new carriers are larger than their World War II-construction predecessors, the total number of shipboard naval aircraft has only declined by about a third rather than by half.) There has been a parallel and related reduction in the number of major surface combatants from more than 300 to the present level of about 200 ships. Amphibious lift ships, submarines, and support ship forces also have declined numerically from highs reached during the 1960s. These numerical reductions have been offset to some extent by the significantly improved individual capabilities of the ships and aircraft.

The current vigorous naval modernization program, funded in part by the savings achieved from retiring older ships, should result in surface combatant force levels climbing back to about 230 ships by the end of this decade. The number of general purpose nuclear-powered attack submarines is projected to increase from 59 at end FY 1974 to about 90 by the early 1980s.

These increased force levels are possible in large part because of the decision to pursue the high-low mix concept. Larger numbers of new units with relatively lower capability can be acquired for the same cost as a smaller number of high capability forces. Thus the planned overall force mix takes into account the different threat levels, enabling us to buy both sophisticated multi-purpose aircraft carriers and smaller, less sophisticated and less costly Sea Control Ships; nuclear-powered guided missile frigates as well as smaller patrol frigates; and so forth.

These planned modernization programs, together with continuing research and development leading towards advanced weapons and sensor systems, give us confidence that we and our allies can maintain an adequate naval balance with respect to the USSR into the early 1980s. Planned maritime forces, sea and air, will be capable in general of defending essential worldwide sea lanes, providing a strong capability to project power ashore in selected areas, and sustaining current levels of forward deployments.

4. *Middle East Lessons.*—Soviet actions during the October 1973 Middle East War show that detente is not the only, and in certain circumstances not the primary, policy interest of the USSR. The immediate Soviet arms shipments to Egypt and Syria at the outset of hostilities, the deployment of nuclear-capable SCUD missile launchers, the peremptory Soviet note to the United States Government implying the possibility of direct Soviet military intervention with ground and air forces, and the forward deployment of sizable Soviet naval forces—over 90 Soviet ships in the Mediterranean at the height of the hostilities and smaller naval forces in the Indian Ocean—provided another lesson in Soviet willingness to take risks with world peace.

We also learned useful military lessons from the October hostilities. For example, the value of United States military capabilities—our capacity to airlift and sealift needed munitions and equipment over long distances, and the deterring presence of the Sixth Fleet—was proved. Our quick logistical response capabilities and large naval presence had much to do with moderating the effects of the war.

We learned both from our last campaigns in Vietnam and the ensuing force reductions after Vietnam, as well from the Middle East crisis, that the readiness and level of modernization of our forces were not wholly adequate. With the support of the Congress, we are taking steps to correct this. Also, while our Middle East airlift effort was splendidly executed, we found our dependence on airlift highlighted. We need to increase that capability.

Given the present situation in the Middle East and the growth in the Soviet naval capabilities and deployments worldwide, we have decided also that United States interests would be served by our presence in the Indian Ocean on a more regular basis, i.e., by making more frequent deployments in that area in the coming year. In consonance with that decision, we are recommending to the Congress a budget supplement for \$29 million for the expansion of our support facilities on the Indian Ocean island of Diego Garcia. This will limit the costs of Indian Ocean deployments and provide greater flexibility in the types of forces we would have available in that area of the world.

In addition, the Middle East war confirmed prior judgments about various aspects of modern warfare. The principal points are:

The importance of advanced warning and its assessment, and the ready forces available to take advantage of it;

The heavy attrition of equipment and supplies that can result from modern, intense conventional conflict;

The need for balanced, mutually supporting forces, i.e., not just tanks and aircraft, but infantry, antitank weapons, artillery and ground air defenses as well;

The new importance of modern antitank and air defense weapons;

The importance of defense suppression weapons, equipment and tactics;

The importance of a warm production base, and sufficient reserve stocks of ammunition, spare parts and equipment;

The importance of trained manpower.

None of these lessons is surprising. The Department has been working for some time to improve our capabilities in each of these areas.

5. *Settling Down for the Long Haul.*—As I mentioned at the outset of this introduction, this is our first peacetime defense budget in a decade. It is, therefore, an appropriate time to consider how best to settle down for the long haul, for the continuing, steady task of providing an adequate defense for the United States and its interests. During the next few years, we must search for and assess the best R&D, weapons acquisition, and other strategies for the long haul. In doing so, we must ask such questions as how we can most efficiently compete with our major potential opponents, and what constitutes our own major strengths and weaknesses.

In our adjustment to a long haul posture, there are five basic principles which, in my view, should guide the future conduct of this department. They are that:

The safety of the United States, its citizens, and their lawful pursuits continues to depend on the maintenance of a strong defense establishment. Accordingly, we who represent this department must not be reticent in stating the needs we have or the pride we feel in the performance of the duties of our nation.

We have the responsibility, not only to the United States itself but also to our friends throughout the world, to assure the military balance so necessary to deterrence and a more enduring peace. Other nations led in that responsibility for most of the first two centuries of our national existence; now the cloak of leadership unavoidably embraces us, and we must make the long-term effort to bear it.

The men and women of the Department of Defense are without peers as servants of the nation. It does not follow, however, that patriotism can proceed without respect. We must give them the respect, dignity and support that are their due. Equal opportunity will continue to be a DOD watchword.

To stress our needs is not to ignore an equal obligation, to use our citizens' resources wisely. We must continue to improve the efficiency and effectiveness of our forces and to add to the arsenal of deterrence.

We can and must become increasingly competitive with potential adversaries in a more fundamental sense. We must not be forced out of the market—on land, at sea or in the air. Eli Whitney belongs to us, not to our competitors. He, rather than the medieval craftsmen of Mont St. Michel and Chartres—however magnificent and unique their art—must once more become our model.

I cannot say at this juncture exactly what the long haul holds for this Department. But I can say that unless we are to plan only by intuition, we must continue to build our peace structure on the hard facts of the international environment rather than on gossamer hopes for the imminent perfectability of mankind.

B. THE PROPOSED DEFENSE BUDGET

The President's Defense budget proposals transmitted to the Congress on 4 February were developed within this overall international context, and with the existing economic and fiscal constraints well in mind. These proposals include requests for FY 174 Supplementals—the result of pay and price increases and necessary readiness improvements—as well as funds for FY 1975.

1. *FY 1974 Supplementals.*—The FY 1974 Supplemental requests total \$6.2 billion in addition to the amounts already appropriated by the Congress, raising

the proposed FY 1974 obligation authority (TOA) to \$87.1 billion. As shown on the following table, \$3.4 billion of this Supplemental amount is required for pay and rate increases (most of which was included under Allowances for Civilian and Military pay raises in the original FY 1974 budget request last year); the balance of \$2.8 billion is required to achieve the desired readiness level for U.S. forces.

Fiscal year 1974 supplemental appropriations request

[In millions of dollars]

Force readiness:	
Fuel price increase.....	480
Middle East payback.....	231
Augmented force readiness.....	1,397
Increased airlift capability.....	169
Accelerated modernization.....	516
Strategic program changes.....	25
Total, force readiness.....	2,818
Pay and rate changes:	
January 1, 1973, pay increase (military and civilian).....	1,495
October 1, 1973, pay increase (military and civilian).....	1,060
Military retired pay cost-of-living increases:	
July 1, 1973.....	287
January 1, 1974.....	182
Wage board pay increases.....	236
Increased food costs.....	107
Postal costs.....	48
Total, pay and rate changes.....	3,415
Total supplemental request.....	6,233

The "readiness supplemental" includes fuel price increases in the amount of \$480 million as well as \$231 million in extra costs of our arms supply to Israel. These extra costs result from our increased operations and maintenance activities and the additional cost incurred in replacing in U.S. inventories the material provided to Israel.

The Supplemental request also reflects the most urgent deficiencies in the condition of our forces that were made apparent by the Middle East hostilities. With these deficiencies in mind, I have included \$1,397 million to improve the readiness of our forces, \$169 million to increase our airlift capability, and \$516 million to buy certain high-value weapons and equipment which are now in short supply in our Services.

The readiness improvements include adding to our ammunition stocks, reducing the maintenance backlog on our ships and equipment, making sure pre-positioned equipment is ready for use, improving our defense suppression capabilities, and purchasing short-supply items important for overall readiness.

The airlift improvements I recommended are modest first steps to a more fundamental examination of our airlift capabilities which I believe is necessary. These first steps include expanding C-5 and C-141 utilization rates, developing a stretched version of the C-141, and seeking relatively inexpensive modifications to civil aircraft to permit them to carry military cargoes in an emergency.

The additional high-value weapons and equipment purchases proposed in the Supplemental include TOW antitank missiles for the Army and Marines, M-60 tanks and M113A1 armored personnel carriers for the Army, vehicles for the Marines, P-3C antisubmarine warfare aircraft for the Navy, air munitions for the Navy and Air Force, and improvements to a number of USAF aircraft. An increase in RDT&E funds is also proposed for all of the Services.

Finally, the FY 1974 Supplemental includes \$25 million for long lead time items for the second Trident submarine.

2. *The FY 1975 Budget.*—The FY 1975 Budget request in total obligational authority (TOA) amounts to \$92.6 billion, an increase of \$5.5 billion over FY

1974 and \$12.1 billion over FY 1973. Outlays for FY 1975 are estimated at \$85.8 billion, an increase of \$6.3 billion over FY 1974 and \$12 billion over FY 1973. These FY 1975 totals include the amounts transmitted to the Congress by the President, plus estimates for pay raises expected to become effective during the year and the costs of proposed new legislation.

This request is a substantial one, but I offer no apologies for its size. The FY 1975 Budget bears directly on the question of whether or not the United States will continue to fulfill the responsibilities it has around the world. In real terms, moreover, it is somewhat smaller than the amount actually provided for FY 1973. As shown in the following table, the increase of about \$12.1 billion in TOA over FY 1973 (in current dollars) is almost wholly consumed by pay and price increases.

Pay and price increases: fiscal year 1973 to 1975 (excluding retired pay)

[Total, in millions of dollars]

Pay increases: January 1973 pay increase (in effect for 6 months of fiscal year 1973 and all 12 months of fiscal year 1975); October 1973 pay increase, October 1974 pay increase; wage board (blue collar) pay increase.	4,598
Increased subsistence costs and other military allowances (existing legislation)	743
Petroleum price increases	1,698
Inflation on other purchases (7 percent from fiscal year 1973 to fiscal year 1974 and 4.6 percent estimated from fiscal year 1974 to fiscal year 1975)	4,689
Space rental to GSA (required starting in fiscal year 1975)	183
Proposed legislation (military allowances)	187
Total	12,098

The three general pay increases (military and white-collar civil service) and the blue-collar (wage board) pay increases which take place regularly over this period will add about \$4.6 billion to the FY 1975 Budget.

The cost of subsistence will be almost a half billion dollars higher in FY 1975 than in FY 1973. The ration rate was \$1.46 per man per day on January 1, 1972, \$1.65 on January 1, 1973, and \$2.28 on January 1, 1974—the rate reflected in the FY 1975 Budget. Higher costs for clothing, certain station allowances, and travel and transportation costs bring the total add-on for subsistence and other military allowances to \$743 million in FY 1975.

Petroleum prices on February 1, 1974, were 123 percent above the prices we paid in FY 1973. Even assuming no further price increases, as we have in the FY 1975 budget estimates, this is an add-on of \$1.7 billion.

For all other purchases, we estimate (based on Commerce data through December 1973) that price inflation will amount to 7 percent from FY 1973 to FY 1974, and we hope it will slow to 5 percent from FY 1974 to FY 1975. On this basis, price inflation will add about \$4.7 billion to the FY 1975 Budget.

Beginning in FY 1975, the Defense Department is required by law to pay the General Services Administration an appropriate rental charge for GSA controlled space occupied by the DoD. This charge will amount to \$183 million in FY 1975.

Finally, we are proposing certain items of military personnel legislation which—if enacted—will add \$187 million to our costs in FY 1975.

This means that if we were to carry on the FY 1973 program at FY 1975 price levels and pay rates—employing the same people, purchasing the same items, with nothing added—it would cost us about \$12,098 million more than it actually did in FY 1973. In addition, retired pay will increase about \$1.6 billion from FY 1973 to FY 1975. Thus in formulating our FY 1975 budget request, we had to absorb a total of about \$13.7 billion in pay and price add-ons.

Fortunately, we have been able to stabilize the proportion of Defense outlays which are devoted to pay and allowances, albeit not without some further reduction in personnel. As shown in the table below, pay and allowances will take about 55.4 percent of estimated Defense outlays in FY 1975, compared with 55.8 percent in FY 1973 and 55.2 percent in FY 1974.

PAY COSTS AND MANPOWER TRENDS, SELECTED YEARS
 [Outlays in millions of dollars; manpower in thousands]

	Fiscal year—				
	1964	1968	1973	1974	1975
Military basic pay and related.....	\$8,511	\$12,779	\$17,618	\$17,904	\$19,030
Military special pays and allowances.....	4,475	7,080	5,628	6,261	6,655
Civil service payroll.....	7,305	10,281	12,994	13,812	14,929
Family housing (excluding pay).....	504	396	563	771	878
Subtotal.....	20,795	30,536	36,803	38,748	41,492
Military retired pay.....	1,209	2,095	4,390	5,158	6,011
Total pay and allowances.....	22,004	32,630	41,193	43,906	47,504
Purchases.....	28,782	45,397	32,635	35,594	38,296
Total outlays.....	50,786	78,027	73,828	79,500	85,800
Pay and allowances as percent of the total outlays.....	43.3	41.8	55.8	55.2	55.4
Average strength (nonyears):					
Military.....	2,691	3,436	2,324	2,218	2,177
Civil service.....	1,045	1,276	1,033	1,014	1,019
Total.....	3,736	4,712	3,357	3,232	3,196

The current level of pay and allowances as a percent of total Defense outlays is, of course, substantially above FY 1964 and FY 1968. But this reflects a national decision to pay our military and civilian personnel a compensation comparable to what they could get in the civilian sector of the economy.

In this respect, most of the costs attributed to the All-Volunteer Force result essentially from this same national decision. About 63 percent of the estimated \$3.6 billion associated with the All-Volunteer Force in the FY 1975 Budget is nothing more than a major increase in basic pay for military personnel with less than two years of service—personnel who prior to November 1971 were grossly underpaid in comparison with the civilian sector and with career military personnel.

The FY 1975 Budget in real terms is not only less than the amount provided for FY 1973, it is also smaller than the amount provided for FY 1964, the year before the Vietnam buildup began. Furthermore, for the third consecutive year Defense outlays will take six percent or less of the gross national product and, as shown in the table below, a declining percentage of total Federal budget outlays and net public spending.

	Defense outlays as a percent of fiscal year—				
	1964	1968	1973	1974	1975
Gross national product.....	8.3	9.4	6.0	5.9	5.9
Federal budget (outlays).....	41.8	42.5	29.0	27.9	27.2
Net public spending.....	28.1	29.2	18.5	17.8	17.1

Indeed, much of the talk about reordering national priorities is quite off the mark. As indicated in the following table, National Defense spending per capita in real terms will decline from \$325 in FY 1968 to \$202 in FY 1975, while Other Public spending and Private spending is expected to increase from \$693 to \$900 and \$2,421 to \$3,055, respectively, during the same period.

REAL GNP PER CAPITA, SELECTED YEARS (IN CONSTANT CALENDAR YEAR 1958 PRICES)

Fiscal year	National defense spending	Other public spending	Private spending (consumption and investment)	Total real GNP per capita
1945 (World War II peak).....	\$1,092	\$307	\$1,232	\$2,631
1950 (pre-Korea, post-World War II low).....	119	468	1,609	2,196
1953 (Korea peak).....	383	391	1,772	2,546
1956 (post-Korea).....	269	418	1,941	2,629
1961 (last Eisenhower year).....	245	508	1,896	2,649
1964 (prewar).....	254	569	2,129	2,953
1968 (war peak).....	325	693	2,421	3,438
1975.....	202	900	3,005	4,107

Clearly, a major reallocation of national output has already taken place since FY 1968, and the notion that Defense is consuming a disproportionate share of that output—at the expense of our social welfare and to the detriment of our economy—is simply not supported by the facts. Per capita GNP has increased substantially during the last decade and all of that increase has been devoted to the domestic welfare of the nation.

Although the FY 1975 Defense Budget in real terms is somewhat lower than FY 1973, several important changes in the composition of the program are planned. As indicated in the following table, incremental Southeast Asia costs drop sharply from FY 1973 to FY 1975, while support for the baseline U.S. forces increases.

DEFENSE BUDGET SUMMARY, FISCAL YEARS 1973-75

[TOA in millions of dollars]

	Fiscal year—			Changes,
	1973	1974	1975	1973 to 1975
Current prices:				
Baseline U.S. forces.....	69,769	77,047	83,373	+13,604
MAP.....	1,120	3,295	1,279	+159
Incremental Southeast Asia costs.....	5,171	1,599	1,913	-3,258
Subtotal, excluding retired pay.....	76,060	81,941	86,565	+10,505
Military retired pay.....	4,392	5,164	6,014	+1,622
Total TOA, current prices.....	80,452	87,105	92,579	+12,127
Constant fiscal year 1975 prices:				
Baseline U.S. forces.....	80,756	82,121	83,373	+2,617
MAP.....	1,261	3,449	1,279	+18
Incremental Southeast Asia costs.....	6,141	1,720	1,913	-4,228
Subtotal, excluding retired pay.....	88,158	87,290	86,565	-1,593
Military retired pay.....	5,311	5,662	6,014	+703
Total TOA, constant fiscal year 1975 prices.....	93,469	92,952	92,579	-890

Included in the \$1.9 billion for Southeast Asia costs in FY 1975 is \$1,450 million for the support of South Vietnamese forces and \$463 million for U.S. forces—largely the air units based in Thailand. The rise in these costs from FY 1974 to FY 1975 results from a sharp increase in support for the South Vietnamese forces, which more than offsets a drop in U.S. force costs and the transfer of Laos support to the regular MAP program. The reason for this increase in support for

South Vietnam is threefold: first, the ceasefire has not worked as well as we had hoped and, therefore, South Vietnamese military consumption is well above what was anticipated; second, unlike FY 1974, there are far fewer prior year funds available to meet FY 1975 requirements; and finally, in FY 1974 we fell behind in replacing South Vietnamese equipment losses and greater efforts are required in FY 1975.

The sharp rise in the Military Assistance Program (MAP) in FY 1974 reflects the emergency assistance to Israel. The FY 1975 Military Assistance Program, in constant prices, is about at the same level as in FY 1973.

These changes in Incremental Southeast Asia Costs and MAP make possible within a slowly declining overall Defense budget in real terms (i.e., in constant FY 1975 prices) a modest increase in the support of the Baseline U.S. Forces. This increase amounts to about \$1.4 billion in FY 1974 and \$1.2 billion in FY 1975, or an increase of \$2.6 billion from FY 1973 to FY 1975. The additional resources are applied primarily in three areas, which in my judgment require greater emphasis—new development initiatives for our strategic forces, augmented readiness and accelerated equipment modernization for our general purpose forces, and an increased wartime capability for our strategic airlift forces. Each of these areas is discussed in detail in the following sections of this Defense Report.

II. STRATEGIC FORCES

Among the major capabilities in the defense arsenal of the United States, the strategic nuclear deterrent forces command the most attention. Yet compared with the general purpose forces, their costs are relatively small. And, with brief exceptions, their costs as a percent of the total defense budget have actually declined during the past decade.

As is shown in Appendix Table 1, the obligational authority made available for the strategic forces in FY 1964 amounted to \$8.5 billion—16.8 percent of the total defense budget. After more than a decade of substantial pay raises and a good deal of inflation, the obligational authority we are proposing for the strategic forces in FY 1975 comes to \$7.6 billion—8.2 percent of the total defense budget, or less than half the share devoted to those forces in FY 1964. Such relatively modest figures are hardly compatible with the view that this Administration has been less than restrained in its conduct of the strategic nuclear competition. By any measure, our current effort is much more moderate than it was a decade or more ago.

A. THE BASIS FOR THE STRATEGIC NUCLEAR FORCES

To underline the trends in these relatively modest costs is not to minimize the importance of the strategic nuclear deterrent forces. At the same time that the United States has necessarily become more engaged in world affairs than ever before in its history, it has become increasingly vulnerable to direct nuclear attack and to the possibility of unprecedented destruction. Nuclear weapons now cast their shadow over all of us, and even complete political isolation would no longer relieve us of their threat. The United States is too powerful to be ignored and no longer far enough away (measured by ICBM trajectories) to be out of hostile reach. It is understandable, therefore, why strategic nuclear forces should receive so much attention. Without a firm foundation of nuclear deterrent forces the rest of our power would not count for much in the modern world.

I cannot stress this last point too strongly. All wars since 1945 have been non-nuclear wars shadowed by the nuclear presence. The threat to use nuclear weapons has remained, for the most part, in the background, but belligerents and neutrals alike have known that, like the big stick in the closet, it was there. Perhaps we may hope that in the future, as in the past, the nuclear forces will act as a brake upon violence, and that wars will remain conventional or not begin at all. Perhaps we may even hope that the strategic nuclear forces, by contributing to a worldwide balance of power and international stability, will carry us well beyond detente to a more enduring peace and to a general reduction of armaments.

Not only are the strategic forces vitally important; they are controversial as well. Most of the major defense debates during the past thirty years have centered on them, and alarms have rung over such matters as the B-36, the bomber "gap", the missile "gap", MIRVs, and ABM deployments. Much of the debate has centered on specific weapon systems. But issues have also arisen about the size and composition of the offensive and defensive forces, the nature of alternative

target systems, and the desirability and feasibility of enhancing deterrence and limiting escalation by having the option to avoid destroying enemy cities.

Of equal concern has been the growth to maturity of Soviet strategic offensive forces. Only a decade ago these forces numbered in the hundreds; now we count them in the thousands, and they have a substantially greater throw-weight. As a consequence, the issue that faces us no longer is (if it ever was) how to avoid initiatives that might continue or accelerate the strategic competition, but how—in a situation of essential equivalence—to interpret and respond to a wide range of potential Soviet initiatives.

If we are to have informed and productive debate on these matters, it is important that the Congress and the public understand the evolutionary character of strategic force planning and doctrine. Accordingly, it is essential to review the factors that now shape our strategic nuclear forces, the assumptions we make about these factors in designing our posture, and the directions we propose to take in our Five-Year Defense Program. In undertaking this review, I will place particular emphasis on why we are maintaining such comparatively large and diversified offensive forces, why we are modifying our strategic doctrine, and why we are proposing the pursuit of a number of research and development projects as prudent hedges for the future.

What is generally accepted, as a minimum, is that we ourselves must not contribute to any failures of deterrence by making the strategic forces a tempting target for attack, or prone to accidents, unauthorized acts, or false alarms.

I should also stress that it is only in the process of examining why and how deterrence might fail that we can judge the adequacy of our plans and programs for deterrence. And once that analysis begins, it quickly becomes evident that there are many ways, other than a massive surprise attack, in which an enemy might be tempted to use, or threaten to use, his strategic forces to gain a major advantage or concession. It follows that our own strategic forces and doctrine must take a wide range of possibilities into account if they are successfully to perform their deterrent functions.

Nuclear proliferation represents another important factor. It is a complex process driven by many actions and considerations. But one element affecting its extent and velocity undoubtedly is the degree to which other countries believe that the U.S. strategic deterrent continues—or fails—to protect them. Accordingly, in support of our non-proliferation policy, we must take account of the concerns of other countries in our doctrine and force planning.

There is also an important relationship between the political behavior of many leaders of other nations and what they perceive the strategic nuclear balance to be. By no means do all of them engage in the dynamic calculations about the interaction of Soviet and U.S. forces that have so affected our own judgments in the past. However, many do react to the static measures of relative force size, number of warheads, equivalent megatonnage, and so forth. Hence, to the degree that we wish to influence the perception of others, we must take appropriate steps (by their lights) in the design of the strategic forces.

Finally, an important connection exists between U.S. arms control efforts and the size and composition of the strategic nuclear forces. Arms control agreements are, of course, designed deliberately to constrain the freedom of the parties in the planning of their offensive and defensive capabilities. Strategic programs, in turn, affect the prospects for arms control. And specific weapon systems are the coin of this particular realm. Not only are such systems the mediums of exchange; they are also the basis for expanding or contracting the forces. As a consequence, arms control objectives must have a major impact on our planning.

1. *The Problem of Objectives.*—I believe it is well understood that the size and composition of our strategic nuclear forces must depend to some degree on the magnitude of the overall deterrent burden that we place upon them. It is also a matter of increasingly widespread appreciation that these forces cannot bear the entire burden by themselves, however fundamental their importance may be. Other capabilities, nuclear and non-nuclear, must be maintained in strength to cover the entire spectrum of deterrence. What still requires emphasis, however, is the diversity of roles that the strategic nuclear forces continue to play. Our ability to achieve major national security objectives continues to be hostage to the operational doctrine, size, and composition of these forces.

Deterrence has been and remains the fundamental objective of our strategic nuclear forces. But what precisely do we want these forces to deter? Clearly, we expect them to forestall direct attacks on the United States; at the same time, however, we accept the equally heavy responsibility to deter nuclear attacks

on our allies. To some extent we also depend on the strategic forces to exercise a deterrent effect against massive non-nuclear assaults, although we now place the main emphasis on U.S. and allied theater forces for that purpose. We also view our strategic forces as inhibiting coercion of the U.S. by nuclear powers, and, in conjunction with other U.S. and allied forces, helping to inhibit coercion of our allies by such powers.

While deterrence is our fundamental objective, we cannot completely preclude the possibility that deterrence might fail. The objectives we would want our strategic forces to achieve in those circumstances remain an issue to which I shall return.

2. USSR and PRC Strategic Objectives.--Despite the importance of these objectives, it is probably the present and prospective strategic nuclear forces of other nations that constitute the single most powerful influence on the design of our own capabilities. Most of our strategic objectives, in fact, are a function of these potential threats.

The most important nuclear capability facing the United States is that of the USSR. As we engage in our own planning, we need to understand better than we now do why this capability is evolving at such a rapid rate and what the Soviets hope to gain by such large expenditures and such ambitious programs. Only with an improved understanding can we decide judiciously what impact this capability should have on our own choice of strategic programs.

Primarily at issue are the answers to two major questions. To what extent have the Soviets simply responded to and tried to counter U.S. initiatives? And to what extent have they sought (and do they continue to seek) something more ambitious than a capability for second-strike massive retaliation against the United States?

Much has been written on both counts, at least in the United States. But the Soviets have not proved especially communicative about their programs and motives, and the evidence of what they are up to is, to say the least, fragmentary and conflicting. As so often is the case, we are faced with uncertainty. Admittedly, my counterparts in the Soviet Ministry of Defense could substantially reduce this uncertainty by disclosing current and even past information about their decisions to the same extent that the United States does. But in the absence of such candor, we have no choice but to interpret the available evidence as best we can.

What does this evidence suggest?

First, the Soviets have proceeded with development of many strategic programs ahead of rather than in reaction to what the United States has done. It is worth recalling, in this connection, that they took the initiative in the deployment of MRBMs and IRBMs, ICBMs, ABMs, and FOBSs. At the present time, they have four new ICBMs that are actively being flight tested.

Second, the Soviets--through their medium-range (or peripheral attack) capabilities--may have initially intended to threaten Western Europe as their only response to the intercontinental U.S. threat to the USSR in the early days of the strategic competition. But they have maintained and expanded that threat long after having acquired the capability to launch a direct attack on the United States. Indeed, the size of their medium-range force bears no evident relationship to the capability of its counterparts in Western Europe or even to any urban target system there.

Third, it is noteworthy that the Soviets are apparently not content with the SALT I agreements, which temporarily froze certain Soviet quantitative advantages (in ICBMs and SLBMs) in compensation for certain U.S. advantages. They have decided, as far as we can judge, to strive for at least comparable qualitative capabilities as well.

To sum up, what we now have to face in our force planning is that the Soviets have:

- Acquired better than numerical parity with the United States in terms of strategic nuclear launchers (counting bombers as well as missiles);

- Continued their extensive threat to Western Europe even after having acquired a massive direct threat to the United States;

- Began to exploit the larger throw-weight of their ICBMs so as to permit the eventual deployment of as many as 7,000 potentially high-accuracy MIRVs with large yields;

- Started production of the Backfire bomber which could well evolve into an intercontinental threat.

It is premature to assess confidently what objectives the Soviets have set for themselves with these active, expensive programs. However, it is certainly conceivable that they foresee both political and military advantage, not only in the growing numerical weight of their forces, but also in their potential to bring major portions of our own strategic arsenal into jeopardy.

The United States, for its part, cannot afford to stand idly by in the face of these developments. As I shall discuss later, we are recommending a number of quite specific research programs to hedge against any sustained drive to achieve what the Soviet Union may regard, however, mistakenly, as meaningful, exploitable, superiority. Preferably by agreement or if necessary by unilateral action, we believe that we must maintain an essential equivalence with them. We are prepared to balance our strategic forces down if SALT succeeds, or to balance them up if we must match Soviet momentum.

The Soviet strategic capability no longer is the only one that we must take into account in our force planning. A second important force from the standpoint of the United States is that of the Peoples' Republic of China (PRC). During the past decade, the Chinese have moved steadily from a program of development and testing to a deployed nuclear capability. We now estimate that they already have on line a modest number of MRBMs, IRBMs, and nuclear-capable medium and light bombers.

Previous forecasts about the evolution of this capability have not proved particularly reliable, and I cannot guarantee any higher confidence in the current projections. Nevertheless, we estimate that the PRC could achieve an ICBM initial operating capability as early as 1976 and an SLBM initial operating capability at a somewhat later date.

We do not yet have much insight into the strategic and political objectives that the PRC is seeking to achieve with these deployments. But certain interesting features about them are already evident.

The Chinese are clearly sensitive to the importance of second-strike nuclear capabilities and are making a considerable effort to minimize the vulnerability of their strategic offensive forces.

The range and location of their systems are such that they can already cover important targets in the eastern USSR. But they are also located so as to cover other countries on their periphery.

With the deployment of the ICBM that they have under development (and later an SLBM), they will have the capability to reach targets throughout the USSR and in the United States as well.

Our relations with the PRC have, of course, improved very dramatically during the last four years. Moreover, the present Chinese leadership may well be striving for exclusively second-strike countercity forces. Nonetheless, we must in prudence take these forces into account in our planning.

Any assessment of the nuclear threats facing the United States must keep certain other prospects in mind as well. In the not very distant future, five nations (U.S., USSR, PRC, UK, and France) will have deployed SLBM forces at sea. It will clearly be desirable in these circumstances to have some idea about the identity and general location of these different forces, together with highly reliable communications and tight control over our own land-based and sea-based nuclear capabilities.

It is even more essential that we focus on the issues that could arise if and when several additional nations acquire nuclear weapons, not necessarily against the United States, but for possible use or pressure against one another. Such a development could have a considerable impact on our own policies, plans, and programs. Indeed, this prospect alone should make it evident that no single target system and no stereotyped scenario of mutual city-destruction will suffice as the basis for our strategic planning.

3. *Deterrence and Assured Destruction.*—I frankly doubt that our thinking about deterrence and its requirements has kept pace with the evolution of these threats. Much of what passes as current theory wears a somewhat dated air—with its origins in the strategic bombing campaigns of World War II and the nuclear weapons technology of an earlier era when warheads were bigger and dirtier, delivery systems considerably less accurate, and forces much more vulnerable to surprise attack.

The theory postulates that deterrence of a hostile act by another party results from a threat of retaliation. This retaliatory threat, explicit or implicit, must

be of sufficient magnitude to make the goal of the hostile act appear unattainable, or excessively costly, or both. Moreover, in order to work, the retaliatory threat must be credible: that is, believable to the party being threatened. And it must be supported by visible, employable military capabilities.

The theory also recognizes that the effectiveness of a deterrent depends on a good deal more than peacetime declaratory statements about retaliation and the existence of a capability to do great damage. In addition, the deterrent must appear credible under conditions of crisis, stress, and even desperation or irrationality on the part of an opponent. And since, under a variety of conditions, the deterrent forces themselves could become the target of an attack, they must be capable of riding out such an attack in sufficient quantity and power to deliver the threatened retaliation in a second strike.

The principle that nuclear deterrence (or any form of deterrence, for that matter) must be based on a high-confidence capability for second-strike retaliation—even in the aftermath of a well-executed surprise attack—is now well established. A number of other issues remain outstanding, however. A massive, bolt-out-of-the-blue attack on our strategic forces may well be the worst possible case that could occur, and therefore extremely useful as part of the force sizing process. But it may not be the only, or even the most likely, contingency against which we should design our deterrent. Furthermore, depending upon the contingency, there has been a long-standing debate about the appropriate set of targets for a second strike which, in turn, can have implications both for the types of war plans we adopt and the composition of our forces.

This is not the place to explore the full history and details of that long-standing strategic debate. However, there is one point to note about its results. Although several targeting options, including military only and military plus urban/industrial variations, have been a part of U.S. strategic doctrine for quite some time, the concept that has dominated our rhetoric for most of the era since World War II has been massive retaliation against cities, or what is called assured destruction. As I hardly need emphasize, there is a certain terrifying elegance in the simplicity of the concept. For all that it postulates, in effect, is that deterrence will be adequately (indeed amply) served if, at all times, we possess the second-strike capability to destroy some percentage of the population and industry of a potential enemy. To be able to assure that destruction, even under the most unfavorable circumstances—so the argument goes—is to assure deterrence, since no possible gain could compensate an aggressor for this kind and magnitude of loss.

The concept of assured destruction has many attractive features from the standpoint of sizing the strategic offensive forces. Because nuclear weapons produce such awesome effects, they are ideally suited to the destruction of large, soft targets such as cities. Furthermore, since cities contain such easily measurable contents as people and industry, it is possible to establish convenient quantitative criteria and levels of desired effectiveness with which to measure the potential performance of the strategic offensive forces. And once these specific objectives are set, it becomes a relatively straightforward matter—given an authoritative estimate about the nature and weight of the enemy's surprise attack—to work back to the forces required for second-strike assured destruction.

The basic simplicity of the assured destruction calculation does not mean that the force planner is at a loss for issues. On the contrary, important questions continue to arise about the assumptions from which the calculations proceed. Where, for the sake of deterrence, should we set the level of destruction that we want to assure? Is it enough to guarantee the ruin of several major cities and their contents, or should we—to assure deterrence—move much further and upward on the curve of destruction? Since our planning must necessarily focus on the forces we will have five or even ten years hence, what should we assume about the threat—that is, the nature and weight of the enemy attack that our forces must be prepared to absorb? How pessimistic should we be about the performance of these forces in surviving the attack, penetrating enemy defenses (if they exist), and destroying their designated targets? How conservative should we be in buying insurance against possible failures in performance?

Generally speaking, national policy makers for more than a decade have chosen to answer these questions in a conservative fashion. Against the USSR, for example, we tended in the 1960s to talk in terms of levels of assured destruc-

tion at between a fifth and a third of the population and between half and three-quarters of the industrial capacity. We did so for two reasons:

Beyond these levels very rapidly diminishing increments of damage would be achieved for each additional dollar invested.

It was thought that amounts of damage substantially below those levels might not suffice to deter irrational or desperate leaders.

We tended to look at a wide range of threats and possible attacks on our strategic forces, and we tried to make these forces effective even after their having been attacked by high but realistically constrained threats. That is to say, we did not assume unlimited budgets or an untrammelled technology on the part of prospective opponents, but we were prudent about what they might accomplish within reasonable budgetary and technological constraints. Our choice of assumptions about these factors was governed not by a desire to exaggerate our own requirements but by the judgment that, with so much at stake, we should not make national survival a hostage to optimistic estimates of our opponents' capabilities.

In order to ensure the necessary survival and retaliatory effectiveness of our strategic offense, we have maintained a TRIAD of forces, each of which presents a different problem for an attacker, each of which causes a specialized and costly problem for his defense, and all of which together currently give us high confidence that the force as a whole can achieve the desired deterrent objective.

That, however, is only part of the explanation for the present force structure. We have arrived at the current size and mix of our strategic offensive forces not only because we want the ultimate threat of massive destruction to be really assured, but also because for more than a decade we have thought it advisable to test the force against the "higher-than-expected" threat. Given the built-in surplus of warheads generated by this force-sizing calculation, we could allocate additional weapons to non-urban targets and thereby acquire a limited set of options, including the option to attack some hard targets.

President Nixon has strongly insisted on continuing this prudent policy of maintaining sufficiency. As a result, I can say with confidence that in 1974, even after a more brilliantly executed and devastating attack than we believe our potential adversaries could deliver, the United States would retain the capability to kill more than 30 percent of the Soviet population and destroy more than 75 percent of Soviet industry. At the same time we could hold in reserve a major capability against the PRC.

Such reassurances may bring solace to those who enjoy the simple but arcane calculations of assured destruction. But they are of no great comfort to policy-makers who must face the actual decisions about the design and possible use of the strategic nuclear forces. Not only must those in power consider the morality of threatening such terrible retribution on the Soviet people for some ill-defined transgression by their leaders; in the most practical terms, they must also question the prudence and plausibility of such a response when the enemy is able, even after some sort of first strike, to maintain the capability of destroying our cities. The wisdom and credibility of relying simply on the preplanned strikes of assured destruction are even more in doubt when allies rather than the United States itself face the threat of a nuclear war.

4. *The Need for Options.*— President Nixon underlined the drawbacks to sole reliance on assured destruction in 1970 when he asked:

"Should a President, in the event of a nuclear attack, be left with the single option of ordering the mass destruction of enemy civilians, in the face of the certainty that it would be followed by the mass slaughter of Americans? Should the concept of assured destruction be narrowly defined and should it be the only measure of our ability to deter the variety of threats we may face?"

The questions are not new. They have arisen many times during the nuclear era, and a number of efforts have been made to answer them. We actually added several response options to our contingency plans in 1961 and undertook the retargeting necessary for them. However, they all involved large numbers of weapons. In addition, we publicly adopted to some degree the philosophies of counterforce and damage-limiting. Although differences existed between those two concepts as then formulated, particularly in their diverging assumptions about cities as likely targets of attack, both had a number of features in common.

Each required the maintenance of a capability to destroy urban-industrial targets, but as a reserve to deter attacks on U.S. and allied cities rather than as the main instrument of retaliation.

Both recognized that contingencies other than a massive surprise attack on the United States might arise and should be deterred; both argued that the ability and willingness to attack military targets were prerequisites to deterrence.

Each stressed that a major objective, in the event that deterrence should fail, would be to avoid to the extent possible causing collateral damage in the USSR, and to limit damage to the societies of the United States and its allies.

Neither contained a clear-cut vision of how a nuclear war might end, or what role the strategic forces would play in their termination.

Both were considered by critics to be open-ended in their requirement for forces, very threatening to the retaliatory capabilities of the USSR, and therefore dangerously stimulating to the arms race and the chances of preemptive war.

The military tasks that each involved, whether offensive counterforce or defensive damage-limiting, became increasingly costly, complex, and difficult as Soviet strategic forces grew in size, diversity, and survivability.

Of the two concepts, damage-limiting was the more demanding and costly because it required both active and passive defenses as well as a counterforce capability to attack hard targets and other strategic delivery systems. Added to this was the assumption (at least for planning purposes) that an enemy would divide his initial attack between our cities and our retaliatory forces, or switch his fire to our cities at some later stage in the attack. Whatever the realism of that assumption, it placed an enormous burden on our active and passive defenses—and particularly on anti-ballistic missile (ABM) systems—for the limitation of damage.

With the ratification of the ABM treaty in 1972, and the limitation it imposes on both the United States and the Soviet Union to construct no more than two widely separated ABM sites (with no more than 100 interceptors at each), an essential building-block in the entire damage-limiting concept has now been removed. As I shall discuss later, the treaty has also brought into question the utility of large, dedicated anti-bomber defenses, since without a defense against missiles, it is clear that an active defense against bombers has little value in protecting our cities. The salient point, however, is that the ABM treaty has effectively removed the concept of defensive damage limitation (at least as it was defined in the 1960s) from contention as a major strategic option.

Does all of this mean that we have no choice but to rely solely on the threat of destroying cities? Does it even matter if we do? What is wrong, in the final analysis, with staking everything on this massive deterrent and pressing ahead with a further limitation of these devastating arsenals?

No one who has thought much about these questions disagrees with the need, as a minimum, to maintain a conservatively designed reserve for the ultimate threat of large-scale destruction. Even more, if we could all be guaranteed that this threat would prove fully credible (to friend and foe alike) across the relevant range of contingencies—and that deterrence would never be severely tested or fail—we might also agree that nothing more in the way of options would ever be needed. The difficulty is that no such guarantee can be given. There are several reasons why any assurance on this score is impossible.

Since we ourselves find it difficult to believe that we would actually implement the threat of assured destruction in response to a limited attack on military targets that caused relatively few civilian casualties, there can be no certainty that, in a crisis, prospective opponents would be deterred from testing our resolve. Allied concern about the credibility of this particular threat has been evident for more than a decade. In any event, the actuality of such a response would be utter folly except where our own or allied cities were attacked.

Today, such a massive retaliation against cities, in response to anything less than an all-out attack on the U.S. and its cities, appears less and less credible. Yet as pointed out above, deterrence can fail in many ways. What we need in a series of measured responses to aggression which bear some relation to the provocation, have prospects of terminating hostilities before general nuclear war breaks out, and leave some possibility for restoring deterrence. It has been this problem of not having sufficient options between massive response and doing nothing, as the Soviets built up their strategic forces, that has prompted the President's concerns and those of our Allies.

Threats against allied forces, to the extent that they could be deterred by the prospects of nuclear retaliation, demand both more limited responses than destroying cities and advanced planning tailored to such lesser responses. Nuclear threats to our strategic forces, whether limited or large-scale, might well call for an option to respond in kind against the attacker's military forces. In other words, to be credible, and hence effective over the range of possible contingencies, deterrence must rest on many options and on a spectrum of capabilities (within the constraints of SALT) to support these options. Certainly such complex matters as response options cannot be left hanging until a crisis. They must be thought through beforehand. Moreover, appropriate sensors to assist in determining the nature of the attack, and adequately responsive command-control arrangements, must also be available. And a venturesome opponent must know that we have all of these capabilities.

Flexibility of response is also essential because, despite our best efforts, we cannot guarantee that deterrence will never fail; nor can we forecast the situations that would cause it to fail. Accidents and unauthorized acts could occur, especially if nuclear proliferation should increase. Conventional conflicts could escalate into nuclear exchanges; indeed, some observers believe that this is precisely what would happen should a major war break out in Europe. Ill-informed or cornered and desperate leaders might challenge us to a nuclear test of wills. We cannot even totally preclude the massive surprise attack on our forces which we use to test the design of our second-strike forces, although I regard the probability of such an attack as close to zero under existing conditions. To the extent that we have selective response options—smaller and more precisely focused than in the past—we should be able to deter such challenges. But if deterrence fails, we may be able to bring all but the largest nuclear conflicts to a rapid conclusion before cities are struck. Damage may thus be limited and further escalation avoided.

I should point out in this connection that the critics of options cannot have the argument both ways. If the nuclear balance is no longer delicate and if substantial force asymmetries are quite tolerable, then the kinds of changes I have been discussing here will neither perturb the balance nor stimulate an arms race. If, on the other hand, asymmetries do matter (despite the existence of some highly survivable forces), then the critics themselves should consider seriously what responses we should make to the major programs that the Soviets currently have underway to exploit their advantages in numbers of missiles and payload. Whichever argument the critics prefer, they should recognize that:

Inertia is hardly and appropriate policy for the United States in these vital areas;

We have had some large-scale pre-planned options other than attacking cities for many years, despite the rhetoric of assured destruction;

Adding more selective, relatively small-scale options is not necessarily synonymous with adding forces, even though we may wish to change their mix and improve our command, control, and communications.

However strong in principle the case for selective options, several questions about it remain. What kinds of options are feasible? To what extent would their collateral effects be distinguishable from those of attacks deliberately aimed at cities? And what are their implications for the future size and composition of our strategic forces and hence for our arms control objectives in this realm?

Many of the factors bearing on these questions will become more evident later in this statement. It is worth stressing at this point, however, that targets for nuclear weapons may include not only cities and silos, but also airfields, many other types of military installations, and a variety of other important assets that are not necessarily collocated with urban populations. We already have a long list of such possible targets; now we are grouping them into operational plans which would be more responsive to the range of challenges that might face us. To the extent necessary, we are retargeting our forces accordingly.

Which among these options we might choose in a crisis would depend on the nature of an enemy's attack and on his objectives. Many types of targets can be pre-programmed as options—cities, other targets of value, military installations of many different kinds, soft strategic targets, hard strategic targets. A number of so-called counterforce targets, such as airfields, are quite soft and can be destroyed without pinpoint accuracy. The fact that we are able to knock out these

targets—counterforce though it may be—does not appear to be the subject of much concern.

In some circumstances, however, a set of hard targets might be the most appropriate objective for our retaliation, and this I realize is a subject fraught with great emotion. Even so, several points about it need to be made.

The destruction of a hardened target is not simply a function of accuracy; it results from the combined effects of accuracy, nuclear yield, and the number of warheads applied to the target.

Both the United States and the Soviet Union already have the necessary combinations of accuracy, yield, and numbers in their missile forces to provide them with some hard-target kill capability, but it is not a particularly efficient capability.

Neither the United States nor the Soviet Union now has a disarming first strike capability, nor are they in any position to acquire such a capability in the foreseeable future, since each side has large numbers of strategic offensive systems that remain untargetable by the other side. Moreover, the ABM Treaty forecloses a defense against missiles. As I have already noted in public: "The Soviets, under the Interim Offensive Agreement, are allowed 62 submarines and 950 SLBM launchers. In addition, they have many other nuclear forces. Any reasonable calculation would demonstrate, I believe, that it is not possible for us even to begin to eliminate the city-destruction potential embodied in their ICBMs, let alone their SLBM force."

The moral of all this is that we should not single out accuracy as some sort of unilateral or key culprit in the hard-target-kill controversy. To the extent that we want to minimize unintended civilian damage from attacks on even soft targets, as I believe we should, we will want to emphasize high accuracy, low yields, and airburst weapons.

To enhance deterrence, we may also want a more efficient hard-target-kill capability than we now possess: both to threaten specialized sets of targets (possibly of concern to allies) with a greater economy of force, and to make it clear to a potential enemy that he cannot proceed with impunity to jeopardize our own system of hard targets.

Thus, the real issue is how much hard-target-kill capability we need, rather than the development of new combinations of accuracy and yield per se. Resolution of the quantitative issue, as I will discuss later, depends directly on the further evolution of the Soviet strategic offensive forces and on progress in the current phase of the Strategic Arms Limitation Talks.

In the meantime, I would be remiss if I did not recommend further research and development on both better accuracy and improved yield-to-weight ratios in our warheads. Both are essential whether we decide primarily on high accuracy and low yields or whether we move toward an improved accuracy-yield combination for a more efficient hard-target-kill capability than we now deploy in our missiles and bombers. Whichever way we go, we have more need than the Soviets for increased accuracy because of our constrained payloads and low-yield MIRVs which have resulted from our lower missile throw-weights.

With a reserve capability for threatening urban-industrial targets, with offensive systems capable of increased flexibility and discrimination in targeting, and with concomitant improvements in sensors, surveillance, and command-control, we could implement response options that cause far less civilian damage than would now be the case. For those who consider such changes potentially destabilizing because of their fear that the options might be used, let me emphasize that without substantially more of an effort in other directions than we have any intention of proposing, there is simply no possibility of reducing civilian damage from a large-scale nuclear exchange sufficiently to make it a tempting prospect for any sane leader. But that is not what we are talking about here. At the present time, we are acquiring selective and discriminating options that are intended to deter another power from exercising any form of nuclear pressure. Simultaneously, as I shall discuss later, we and our allies are improving our general purpose forces precisely so as to raise the threshold against the use of any nuclear forces.

5. *Separability of Targeting Doctrine and Sizing of Forces.*—The evolution in targeting doctrine is quite separable from, and need not affect the sizing of the strategic forces. It is quite feasible to have the foregoing options within the limits set by the ABM Treaty and the Interim Agreement on offensive forces.

What is more, none of the options we are adopting and none of the programs we are proposing for research and development need preclude further mutually agreed constraints on or reductions in strategic offensive systems through SALT. If the Soviets are prepared to reduce these arsenals in an equitable fashion, we are prepared to accommodate them. In fact, I can say that we would join in such an effort with enthusiasm and alacrity.

To stress changes in targeting doctrine and new options does not mean radical departures from past practice. Nor does it imply any possibility of acquiring a first strike disarming capability. As I have repeatedly stated, both the United States and the Soviet Union now have and will continue to have large, invulnerable second-strike forces. If both powers continue to behave intelligently and perceptively, the likelihood that they would unleash the strategic forces is so low that it approaches zero. We are determined, nonetheless, to have credible responses at hand for any nuclear contingency that might arise and to maintain the clear ability to prevent any potential enemy from achieving objectives against us that he might consider meaningful. The availability of carefully tailored, pre-planned options will contribute to that end. They do not invite nuclear war; they discourage it.

I repeat, we are eager to begin a reduction of the strategic forces by mutual agreement and on terms of parity. That is our first preference. We would be quite content if both the United States and the Soviet Union avoided the acquisition of major counterforce capabilities. But we are troubled by Soviet weapons momentum, and we simply cannot ignore the prospect of a growing disparity between the two major nuclear powers. We do not propose to let an opponent threaten a major component of our forces without our being able to pose a comparable threat. We do not propose to let an enemy put us in a position where we are left with no more than a capability to hold his cities hostage after the first phase of a nuclear conflict. And certainly we do not propose to see an enemy threaten one or more of our allies with his nuclear capabilities in the expectation that we would lack the flexibility and resolve to strike back at his assets (and those of any countries supporting the threat) in such a way as to make his effort both high in cost and ultimately unsuccessful.

How we proceed on these counts will depend on the USSR. But I do not believe that we can any longer delay putting our potential countermeasures into research and development. The Soviets must be under no illusion about our determination to proceed with whatever responses their actions may require. And if we undertake the programs that I shall discuss later, the prospects for misunderstanding should be low. More sensible arrangements for both parties may then be feasible.

6. Strategic Balance and International Stability.—Until the late 1960s, U.S. superiority in launchers, warheads, and equivalent megatonnage was so great that we could ignore or disparage the importance of such "static" measures in comparing our forces with those of the USSR. Now, however, our numerical superiority has disappeared in almost every category except that of warheads, and it could dwindle very rapidly there as well.

Whether the Soviets believe that with the shift in these indicators they have achieved any meaningful, exploitable, advantage is not clear. However, they have not been reticent in stressing to a variety of audiences their superiority over the United States in numbers of ICBMs and other strategic capabilities. Their words, at least, have suggested that they see these asymmetries as giving them diplomatic if not military leverage.

As far as we can judge, moreover, the Soviets now seem determined to exploit the asymmetries in ICBMs, SLBMs, and payload we conceded to them at Moscow. Apparently, they are considering the deployment of large numbers of heavy and possibly very accurate MIRVs. As I have already indicated, this kind of deployment could in time come to threaten both our bombers and our ICBMs. Admittedly, we would still retain immense residual power in our deployed SLBM force, and the Soviets would surely know it. But to many interested observers, the actual and potential asymmetries (as measured by these "static" criteria) would look even more pronounced in favor of the USSR.

In such circumstances we cannot exclude the possibility that future Soviet leaders might be misled into believing that such apparently favorable asymmetries could, at the very least, be exploited for diplomatic advantage. Pressure, confrontation, and crisis could easily follow from a miscalculation of this nature.

It is all well and good to assert that the Soviet leaders, faced by an adamant and unified America, would come to their senses in time to avoid fatal mistakes in such a situation and would recognize the illusory nature of their advantages. But a crisis might already be too late for such an awakening. It is worth a price in research and development hedges to prevent such illusions from arising in the first place.

None of this should be taken to mean that exact symmetry must exist between the two offensive forces. The United States is willing to tolerate the existence of asymmetries provided that, in an era of alleged parity, they do not all favor one party. But we are not prepared to accept a situation in which all the visible asymmetries point in one direction. And we know from experience that the Soviets are not prepared to do so either. The potential for misunderstanding, miscalculation, and diplomatic error is too great to risk. A more equitable and stable arrangement would be one in which both sides maintain survivable second-strike reserves, in which there is symmetry in the ability of each side to threaten the other and in which there is a perceived equality between the offensive forces of both sides.

Accordingly, not only must our strategic force structure contain a reserve for threatening urban-industrial targets, the ability to execute a number of options, and the command-control necessary to evaluate attacks and order the appropriate responses; it must also exhibit sufficient and dynamic countervailing power so that no potential opponent or combination of opponents can labor under any illusion about the feasibility of gaining diplomatic or military advantage over the United States. Allied observers must be equally persuaded as well. In this sense, the sizing of our strategic arsenal, as distinct from our targeting doctrine, will depend on the outcome of SALT. In default of a satisfactory replacement for the Interim Agreement on strategic offensive forces, we will have to incorporate "static" measures and balancing criteria into the planning of our strategic offensive forces.

7. *Principal Features of the Proposed Posture.*—This review of the factors that necessarily shape the planning and programming of the strategic nuclear forces should also indicate the principal features that we propose to maintain and improve in our strategic posture. They are:

A capability sufficiently large, diversified, and survivable so that it will provide us at all times with high confidence of riding out even a massive surprise attack and of penetrating enemy defenses, and with the ability to withhold an assured destruction reserve for an extended period of time.

Sufficient warning to ensure the survival of our heavy bombers together with the bomb alarm systems and command-control capabilities required by our National Command Authorities to direct the employment of the strategic forces in a controlled, selective, and restrained fashion.

The forces to execute a wide range of options in response to potential actions by an enemy, including a capability for precise attacks on both soft and hard targets, while at the same time minimizing unintended collateral damage.

The avoidance of any combination of forces that could be taken as an effort to acquire the ability to execute a first-strike disarming attack against the USSR.

An offensive capability of such size and composition that all will perceive it as in overall balance with the strategic forces of any potential opponent.

Offensive and defensive capabilities and programs that conform with the provisions of current arms control agreements and at the same time facilitate the conclusion of more permanent treaties to control and, if possible, reduce the main nuclear arsenals.

I will now discuss specific aspects of USSR and PRC strategic activities, together with the programs that we propose for the achievement of our force and employment objectives.

B. SIGNIFICANT DEVELOPMENTS IN THE STRATEGIC THREAT

1. *The Soviet Union.*—One of the most important developments in the strategic threat during the past year has been the Soviet Union's demonstration of a MIRV technology. While this development had been anticipated for many years, the scope of the Soviet program as it has now emerged is far more comprehensive than estimated even a year ago. It is now apparent that all four of the new Soviet ICBM's—the SS-X-18, a large liquid-fueled missile in the SS-9 class; the

SS-X-17 and the SS-X-19, two medium liquid-fueled missiles with three to five times the throw-weight of the early model SS-11; and the SS-X-16, a light solid-fueled missile in the SS-13 class—employ a post boost vehicle (PBV), commonly known in our country as a bus-type dispensing system. The SS-X-16 thus far has been flight tested with only one RV, but the other three ICBM's have now all been tested with unmistakably MIRVed payloads.

The breadth and depth of this Soviet ICBM program is further manifested by the wide variety of techniques and technology employed in the new systems. All four of these systems have computers aboard the post boost vehicles. New guidance concepts, two different types of post boost vehicle propulsion, and two different types of launch techniques are employed.

Although the SS-X-16 has thus far been tested with only one RV, a MIRV version cannot be precluded at this time. Indeed, if a MIRVed version is not developed, the only benefit to be derived from the use of a PBV in the SS-X-16 would be a possible improvement in CEP. However, it now appears that a land-mobile version of the SS-X-16 may also be under development. Consequently, this missile may be deployed in both a fixed and land-mobile mode. As you know, the Interim Agreement itself does not restrict the development of land-mobile systems by either side, but the U.S. Government has unilaterally declared that it would consider the deployment of such missiles inconsistent with the objectives of the Agreement.

The SS-X-17 and SS-X-19 are apparently competitive developments of a potential replacement for the SS-11. Of the two, the SS-X-17 is technologically the more advanced. The SS-X-17 has been tested with both a single large RV and with four MIRVs. The single RV version could carry a large warhead and probably has sufficient accuracy to give it a very effective hard target kill capability. The MIRVed version, with much smaller warheads, would be essentially a soft target weapon. The SS-X-19, in contrast, has been tested only with a MIRVed payload of six RVs. We believe that it is not as yet sufficiently accurate to constitute a hard target weapon.

Nevertheless, the SS-X-17 and SS-X-19 MIRVs are clearly designed for greater accuracy, e.g., they have reentry vehicle configurations shaped for high speed atmospheric reentry. Consequently, with further refinements in the PBV guidance systems (and, hence, better CEPs) they may in time acquire a hard target capability. Both of these ICBMs can be deployed in the new type silos. With some modifications to the silos, particularly in the case of the SS-X-19 which is longer than the S-11 and the SS-X-17, they could also be deployed in the current S-11 silos.

The SS-X-18, like the SS-X-17, has been tested with both a single large RV and with five relatively large MIRVs. We believe that even the MIRVed version will have a very respectable hard target kill capability. The SS-X-18 can be deployed in the new type large silos, and with some modification to the silos, in the existing SS-9 silos.

In summary, the new Soviet ICBM program represents a truly massive effort—four new missiles, new bus-type dispensing systems, new MIRVed payloads, new guidance, new-type silos, new launch techniques, and probably new warheads. If all three of the new and heavier missiles are deployed, throw-weight in the Soviet ICBM force will increase from the current 6-7 million pounds to be impressive 10-12 million pounds. This throw-weight, combined with increased accuracy and MIRV's, could give the Soviets on the order of 7,000 one-to-two megaton warheads in their ICBM force alone. This very impressive program appears to have three main objectives—expanded target coverage (particularly countermilitary) with MIRVs, improved pre-launch survivability with the new hard silo designs, and the attainment of a significant hard target kill capability. Given the warhead yield and CEP currently estimated for the MIRVed version of the SS-X-18, and looking at the fixed land-based portion of our strategic TRIAD in isolation from other elements, a force of about 300 of these missiles (permitted under the Interim Agreement) could pose a serious threat to our ICBM's in their silos, even after those silos are upgraded. Moreover, it is more than likely that the MIRVed follow-on to the SS-11, whether it be the SS-X-17 or SS-X-19, will also achieve a respectable hard target kill capability during the early part of the next decade.

The most notable development in the Soviet SLBM program during the past year is the flight test of a new multiple RV version of the SS-N-6. These are IRVs rather than MIRVs, i.e., they are not individually targetable. Hence,

this SS-N-6 is similar to our Polaris A-3. There is as yet no evidence of a MRV or MIRV version of the longer range SS-N-8, which is being deployed in the new D-class submarine. Nor is there any evidence of depressed trajectory testing of either the SS-N-6 or the SS-N-8.

We believe that virtually all SSBN production has now shifted to the D-class which carries 12 launchers each. (There is some evidence, however, that a modified D-class submarine with more than 12 tubes may now be under construction.) A total of 33 Y-class submarines (with 16 launchers each) has been completed and 18 or 19 D-class had been launched or were being assembled by the end of 1973, for a total of at least 744 launchers. Thus, it appears that the Soviet Union intends to go beyond the "baseline" SAL ceiling of "740 ballistic missile launchers on nuclear-powered submarines".

The Interim Agreement gives the Soviet Union the option to replace its old SS-7s and 8s (209 launchers) with "modern" SLBM launchers (SS-N-6s and 8s or better) up to a total of 950 launchers and 62 modern nuclear-powered submarines (Y and D-class or better). However, the phase out of the old systems is not required until the submarine with the 741st launcher enters sea trials—which we now estimate will occur in mid-1975. At the current rate of production, 6-8 per year, the Soviet Union could have 62 operational "modern ballistic missile submarines" by mid-1977.

The major ongoing development in the Soviet strategic bomber force is, of course, the Backfire. We expect the first squadron of Backfires to become operational sometime this year.

The question of range and primary mission of the Backfire has yet to be fully resolved. It now appears that the latest model will have a greater range than estimated for the earlier model. This factor, coupled with its known refueling capability, would seem to indicate that the Backfire could be used as an intercontinental as well as a peripheral bomber, the role for which it appears best suited. Even so, the deployment of this new bomber would not substantially alter the U.S. air defense problem. As long as we cannot defend our cities against ballistic missile attack, there is little to be gained by trying to defend them against bomber attack. I will have more to say about this matter when I discuss our revised air defense program.

With regard to Soviet strategic defensive programs, there is still no evidence that the construction of an ABM defense for an ICBM area has been started. (The ABM Treaty allows both sides a total of 200 ABM launchers, 100 for the defense of the national capital area and 100 for the defense of an ICBM area.) In fact, there have as yet been no additions to the 64 ABM launchers in place around Moscow before the ABM Treaty was signed. The Soviet Union, however, has not lost interest in ABM defense. Flight testing of the new ABMs discussed here last year is continuing.

Modernization of Soviet air defenses is also continuing. The number of active SA-2 sites is declining, but additional SA-3 low altitude and SA-5 high altitude SAMs are being deployed. Similarly, new and more capable interceptors are entering the forces, but at a slower rate than older interceptors are being phased out. Although the Soviet air defense system is the most formidable in the world and is still being improved, it is not likely to offer an insurmountable obstacle to our bomber force in the foreseeable future. Should the Soviet Union develop and deploy an AWACS-FOXBAT "look-down, shoot-down" air defense system, as described in this report in past years, we would of course have to counter it with new penetration devices and techniques such as the cruise missile, bomber defense missiles, and improved ECM.

In this connection, we must be careful not to draw a false analogy from the Hanoi and Suez Canal air defense experiences. In both those cases the air defenses were heavily concentrated in a very limited area; moreover, only conventional weapons were employed by the attacking aircraft. In the case of the Soviet Union, the number of places which have to be defended is very large and, consequently, the air defenses are spread over a vast area. Our bombers, in striking back at the Soviet Union, would be penetrating at very low altitudes to avoid the high and medium altitude SAMs, and would be using SRAMs to attack the low altitude SAM batteries. Moreover, our bombers would be employing nuclear weapons, only one of which need penetrate to destroy the target and probably much of its air defenses.

2. *The People's Republic of China.*—The PRC land-based ballistic missile program is progressing slowly but steadily. Most important from the U.S. point of view is the continuing development of the ICBM, which was flight tested again in 1973. We remain convinced that the PRC will pursue that program to a successful conclusion and achieve an ICBM capability before the end of this decade. Even a small force of operational ICBMs in hard silos—20 to 30—would give the PRC considerable strategic leverage; it would be able to augment its threat to the principal Soviet cities west of the Urals, and for the first time to extend its reach to the major cities in the United States.

Production of the BEAGLE light bomber in the PRC is continuing at a very modest rate. Neither the BEAGLE nor their BADGER medium bomber has sufficient range to reach the continental United States, but both can threaten our forces and allies in Asia and the Western Pacific, as well as the eastern part of the Soviet Union.

The PRC is also gradually strengthening its air defenses with the deployment of additional MIG-19 interceptors and SA-2 type SAMs. Nevertheless, those defenses, because of their qualitative limitations, are not likely to present much of an obstacle to either the United States or the Soviet Union in the event of war, at least during the balance of this decade.

C. U.S. STRATEGIC FORCES AND PROGRAMS

Although the Interim Agreement on strategic offensive forces expires in October 1977, we are continuing to plan our forces within the bounds of that agreement and the ABM Treaty; and, for intelligence estimating purposes, we are assuming the Soviet Union will do the same. Admiral Moorer will provide a detailed comparison of U.S.-USSR strategic forces in his Military Posture presentation. For convenience, a summary comparison is shown on the following page.

1. *Strategic Offensive Forces and Programs.*—We plan to continue in our strategic forces over the foreseeable future an appropriate mix of bombers, ICBMs and SLBMs—the so-called TRIAD. Our purpose in doing so is not to provide an independent assured destruction capability in each element of the strategic forces, as some people have presumed. Rather, it is to achieve a sufficient degree of diversification in our forces to hedge against both foreseeable and unforeseeable risks, and to enable us to continue to make available to the President a reasonable range of strategic options as USSR and PRC capabilities evolve.

I am sure the members of this Committee are well aware that each of the three major elements of our strategic forces has its own particular strengths and weaknesses with regard to pre-launch survivability and the ability to penetrate the enemy defenses. By maintaining an appropriate mix of the three, however, we can maximize their collective strengths and minimize the effects of their individual weaknesses, thus ensuring that the force as a whole is not inherently vulnerable to any one type of attack or any one type of defense.

UNITED STATES AND U.S.S.R. STRATEGIC FORCE LEVELS

	Mid-1973		Mid-1974	
	United States	U.S.S.R.	United States	U.S.S.R.
Offensive:				
ICBM launchers ¹	1,054	1,550	1,054	1,575
SLBM launchers ²	656	550	656	660
Intercontinental bombers ³	496	140	496	140
Force loadings weapons.....	6,784	2,200	7,940	2,600
Defensive: ⁴				
Air defense:				
Interceptors ⁵	559	2,800	532	2,600
SAM launchers.....	481	9,800	261	9,800
ABM defense: Launchers.....		64		64

¹ Excludes launchers at test sites.

² Excludes launchers on diesel-powered submarines.

³ Excludes bombers configured as tankers and reconnaissance aircraft.

⁴ Excludes launchers at test sites.

These numbers represent total active inventory (TAI).

Force diversification is also essential to hedge against the unforeseeable risks, such as technological breakthroughs by the other side and unanticipated weaknesses in one or more of our own systems. Last year we encountered an example of the latter, i.e., some unexpected failures in the operational tests of the Poseidon missile. I will discuss the nature of this problem and the measures being taken to correct it a little later. At this point, I simply want to note that this unanticipated failure, while worrisome, is by no means critical. Aside from the fact that the Poseidon force even now can carry out most of its intended missions, we have a variety of other systems which can fill the gap until the necessary corrective actions are completed. In short, this is precisely the kind of situation the TRIAD was intended to hedge against.

In addition to hedging against risks, a well diversified force is needed to support the President's request for "other strategic options." As I indicated earlier, these other options imply a much wider range of capabilities than that required for assured destruction only. For example, capabilities are required to destroy military as well as urban, defended as well as undefended, and time urgent as well as non-time urgent targets. Moreover, the forces should include some weapons which are highly reliable, some which are highly accurate, and some which are highly controllable from launch to target. Here, again, each member of the TRIAD has some unique capabilities to offer.

On balance, therefore, I believe the continued support of well diversified U.S. strategic offensive forces clearly remains essential to our national security. Given the increasing size and variety of Soviet strategic capabilities, U.S. force diversification will be much more important in the future than it has been in the past.

MINUTEMAN

The principal impact of the new emphasis on "other strategic options", as far as the FY 1975 Budget is concerned, is on the Minuteman program, particularly Minuteman III. This missile, with its capacity for three RVs, relatively good accuracy, rapid retargeting capabilities, and relatively secure and reliable communications links to the National Command Authorities, is clearly a most versatile and cost-effective weapon.

Even without any additional R&D funding, we believe that the CEP of the Minuteman III will gradually improve with continued testing. Beyond that point, further improvements in the counter-military capabilities of our ICBM force would require the deployment of more than the currently planned 550 Minuteman III missiles, larger yield warheads, an improved or new guidance system for Minuteman III, terminally guided maneuvering RVs (MaRVs) or the development and deployment of an entirely new ICBM. In view of the on-going SALT talks, we propose in the FY 1975 Budget to take only those first few steps which are necessary to keep open these options; no decisions have been made to deploy any of these improved systems.

First, we propose to keep the Minuteman III production line going at the lowest feasible rate—five missiles per month. The FY 1974 Budget request included \$394 million for the procurement of the last 136 Minuteman III missiles, plus \$23 million for long leadtime items to protect the option to deploy more than 550 Minuteman III if that should prove desirable. The Congress approved the procurement of 115 missiles in FY 1974, deferring 21 to FY 1975. To that 21, we now propose to add 40 more for operational test assets, making a total buy of 61 missiles in FY 1975. The \$758 million shown for the Minuteman program in FY 1975 on the table beginning on the following page includes \$285 million for the procurement of the 61 missiles and initial spares, and \$15 million for long leadtime items to keep open the option for a FY 1976 buy. No decision has as yet been made to deploy more than 550 Minuteman IIIs; we simply want to keep that option open.

Second, we have requested the Atomic Energy Commission (AEC) to keep open at the lowest feasible rate the MK 12 warhead production line.

Third, we propose to develop the option for some additional refinements in the existing Minuteman guidance system, mostly in the software program, which should further reduce the CEP. Development of these refinements will cost about \$100 million, of which the first \$32 million is included in the FY 1975 amount shown for Minuteman.

Fourth, we propose to proceed with engineering development of a new higher yield warhead for the Minuteman III. The new warhead plus the more advanced

(i.e., miniaturized) arming and fusing mechanism would be incorporated in a new center section which could be retrofitted into the existing Minuteman III MK12 RV without any changes in its weight, balance or other flight characteristics. The flight test data base accumulated for the MK 12 RV, therefore, would be directly applicable to the new MK 12A RV, and flight tests of the latter could be limited to the verification of the new arming and fusing components. The R&D and tooling costs (DOD only) for the MK 12A are estimated at about \$125 million, the first increment of which—\$25 million—is included in the FY 1975 amount shown for Minuteman.

ACQUISITION COSTS OF MAJOR STRATEGIC FORCES MODERNIZATION AND IMPROVEMENT PROGRAMS¹

[Dollars in millions]

	Fiscal year 1973 actual funding	Fiscal year 1974 planned funding ²	Fiscal year 1975 proposed funding
Strategic offense:			
Continued procurement of MINUTEMAN III missiles, MINUTEMAN Silo upgrading and other related programs	816	730	758
Preparations for MINUTEMAN II operational base launch (OBL) tests	8	4	16 37
Advanced ICBM technology			
Conversion of SSBNs to POSEIDON configuration, continued procure- ment of POSEIDON missiles and associated effort	698	313	192
Development, procurement and military construction—TRIDENT submarines and missiles	794	1,435(25)	2,043 16
Initiation of design for a new SSBN			
Development of advanced ballistic reentry systems and technology (ABRES)	93	90	120 73
B-52D modifications	445	449	499
Continued development of new strategic bomber, B-1	203	133	2
Procurement of short range attack missile (SRAM)			
Development of the bomber launched and submarine launched ver- sions of the strategic cruise missile	53	14	125 20
Initial development of advanced tanker/cargo aircraft			
Strategic defense:			
Continued development of the over-the-horizon (OTH) back-scatter radar	3	3	12 61
Continued deployment of SAFEGUARD	599	341	160
Continued development of site defense	80	110	91
Development of advanced ballistic missile defense technology	93	62	50
Development and acquisition of the SLBM phased array radar warn- ing system			
Command and control:			
Development and procurement of advanced airborne command post (AABNCP)	117	50	90 13
Development of SANGUINE ELF system	9	13	86
Civil defense: Continued support of the civil defense program	82	82	

¹ Includes costs of R.D.T. & E., procurement of the system and initial spares, and directly related military construction.
² Figures in parentheses are the amounts included in the fiscal year 1974 supplemental.

Fifth, we plan to initiate advanced development of a terminally guided MaRV for possible retrofit into both ICBMs and SLBMs. This MaRV could give the Minuteman III a very high accuracy, if such a capability should be needed in the future. The \$20 million required to start this program is included in the FY 1975 amount shown for Advanced Ballistic Reentry System (ABRES).

Sixth, we plan to flight test a Minuteman III with a larger number of smaller RVs. This payload, if successfully demonstrated, would give us the option to expand the target coverage of the Minuteman force without any increase in the number of missiles deployed. About \$8 million will be needed to start the test program in FY 1974 and \$19 million to complete the test program in FY 1975. The FY 1974 sum is included in ABRES and the FY 1975 amount in the Minuteman lines shown on the table.

The \$758 million requested for the Minuteman program in FY 1975 also includes funds for the continuation of the Silo Upgrading effort, and for the installation of the Command Data Buffer System at all Minuteman III bases. The ability provided by the latter to retarget the Minuteman III missiles rapidly from the launch control centers will greatly enhance the flexible employment possible with the force. Installation of the new system in the first Minuteman III squadron was completed last year and all 50 missiles in the squadron were suc-

cessfully programmed from the launch control center. Deployment of the 550 Minuteman III missiles will be completed by end FY 1975 but silo upgrading and installation of the Command Data Buffer System in the first two wings, which were deployed before these programs were started, will not be completed until FY 1978. Upgrading of the Minuteman II silos will be completed in FY 1980.

MINUTEMAN II OPERATIONAL BASE LAUNCH TEST

In order to demonstrate the ability of our operationally deployed Minuteman missiles to perform their assigned missions, we now propose to undertake a new Operational Base Launch (OBL) program involving full range flight testing out into the Pacific of eight Minuteman II missiles in as close to an operational configuration and ground environment as possible. Four missiles would be launched from Malmstrom Air Force Base during the winter of 1974-75 and four more from that or some other northern base during the winter of 1975-76.

These would be the first full range flight tests of Minuteman missiles from operational silos. The partial operational base launch tests conducted in 1965, 1966 and 1968, with mixed results, were not actual flight tests. In those tests, the missiles were loaded with just enough fuel for a seven second burn, enough to reach an altitude of about one mile, out to a range of about one mile. The first seven-second test of a Minuteman I from Ellsworth AFB in 1964 was successful. The other three attempts from Grand Forks AFB in late 1966 were not; in each instance the missile failed to launch because of a variety of mechanical difficulties associated with that particular test missile and silo.

All three major versions of Minuteman have, of course, been repeatedly flight tested from Vandenberg Air Force Base out into the Pacific. But to some extent these were specially configured test missiles launched from specially configured test silos under carefully controlled conditions. While the missiles to be launched in the new OBL program would carry dummy warheads, they would be typical operational missiles in all other respects. Operational flight tests of this sort, i.e., from operational silos, are conducted routinely by the Soviet Union; they have conducted about 100 firings of this sort.

Development and test of the special equipment needed for safety and for directing and monitoring the launches has already been funded in prior year budgets. Funds to initiate preparations for the eight Minuteman II OBL tests would be provided through reprogramming in FY 1974; an additional \$16 million is included in the FY 1975 Budget to continue that effort.

ADVANCED ICBM TECHNOLOGY

To ensure a realistic option to modernize our ICBM forces in the 1980's, we are requesting about \$37 million in FY 1975 for advanced technology leading to the development of an entirely new ICBM. We are considering the technologies for both a new, large payload fixed-base missile which could be launched from the existing Minuteman silos, and a new mobile missile, either ground or air launched. As noted earlier, the Interim Agreement itself does not prohibit the development or the deployment of mobile ICBMs. The United States, however, has unilaterally stated that in its view the deployment of operational mobile ICBMs would be inconsistent with the objectives of the Agreement. The Soviet Union has made no response to that statement and, as I noted earlier, we believe that the development of a land-mobile version of the SS-X-16 may be underway. Consequently, we cannot preclude the possibility that a mobile version of the SS-X-16 will eventually be deployed. In that case, we may find it necessary to deploy a mobile ICBM of our own.

In any event, we intend to pursue this new development at a very deliberate pace, pending the outcome of the current SALT negotiations. The initial effort in this new advanced ICBM technology program will be devoted to basing technology leading to the selection of the preferred basing mode, to guidance requirements which are unique to mobile missiles, both air-launched and ground-launched, and to rocket motor technology to increase the amount of throw-weight per pound of propellant. A new guidance system would be incorporated in the new missile. This system, plus appropriately sized MIRVs, would give the new ICBM a very good capability against hard targets.

POSEIDON

The \$192 million requested in FY 1975 for the Poseidon program includes \$129 million to complete the funding (except for FY 1976 and subsequent year outfitting and post-delivery costs) of the last three of the 31 SSBN conversions and the last one of the four submarine tender conversions planned, \$48 million for the support of Poseidon missiles, and \$15 million for the Poseidon Modification Program.

The original FY 1974 Budget included funds for the last five SSBN conversions, but delays in the completion of certain SSBN overhauls made it necessary to defer the last three conversions to FY 1975. The Congressional committees were notified of this delay in September 1973 and the amounts appropriated for FY 1974 already reflect the related funding adjustments. Of the 28 conversions funded through FY 1974, 20 have been completed and are currently deployed, two are in predeployment status, and six are undergoing conversion. As currently scheduled, the last three conversions will all have been started by April 1975. This stretchout will reduce the number of Poseidon-equipped submarines on the line, as compared with last year's estimates, by one at end FY 1975 and two by end FY 1976. The last conversion is scheduled for completion in April, 1977.

The Poseidon Modification Program is the outgrowth of the deficiencies encountered last year in the Poseidon Operational Test (OT) program, which have already been reported to the Congress. In view of the technical problems revealed as a result of these tests, the Unified Commander suspended the Poseidon OT program in March 1973.

A thorough review of all the available Poseidon test data leads to the conclusion that except for a weakness in the RV nose tip, which we believe has been corrected and in any event affects only a small percentage of the force, most of the failures encountered were attributable to random deficiencies in small piece parts such as transistors, electrical connections, fuses, etc., and in the preparation of operational missiles for flight tests. In contrast to the Demonstration and Shake-down Operations (DASO) test missiles, which come directly from the Navy's missile facility at Charleston, S.C., four OT missiles are selected at random from the complement of 16 carried by a submarine returning from patrol. The selected missiles are then modified by removing the entire payload section and replacing it with a test payload of dummy RVs and instrumentation, and by installing a destruct device—all while the missile is still in the launch tube of the submarine.

The deficiencies encountered in the Poseidon OT tests are typical of those experienced in other new weapons systems, and subsequently corrected. None of them is related to the basic design of the Poseidon missile, which we have every reason to believe is entirely sound.

The Poseidon Modification Program is designed to correct deficiencies in the Poseidon missile itself, in the special test hardware, and in procedures. The total cost of the program is currently estimated at \$126 million, about \$23 million to incorporate the necessary changes in missiles still in production and the balance to modify missiles already delivered to the Navy. About \$38 million would be devoted to the more comprehensive testing of small piece parts, \$24 million to replace detonating fuses with those of a new design, \$18 million to improve gimbal assemblies, \$10 million to modify firing units, \$2 million to replace flexible hoses with those of a new design, etc. Improved missiles will be installed in the 21st through 31st converted submarines; the first 20 Poseidon submarines, already deployed, will be retrofitted with the improved missiles over a period of about three years. The entire modification program is expected to be completed by 1977.

TRIDENT

While failures encountered in the Poseidon operational tests have no direct relation to the Trident missile program, they do remind us once again of the monetary risks involved in moving rapidly into large-scale production of any new major weapon system. Operational testing, of course, cannot commence until the system has actually been operationally deployed. But by holding initial production to a reasonably low rate, we can reduce the costs of correcting those

inevitable deficiencies which are not discovered until the system is operationally tested. This is particularly true in the case of such technically advanced and costly weapon systems as the Trident submarine.

Accordingly, after starting the first Trident submarine in FY 1974, we now propose to build the nine remaining Trident submarines discussed here last year at a rate of two a year (instead of three a year) beginning in FY 1975. In addition, we currently plan to procure sufficient Trident I missiles to backfit ten Poseidon submarines. As you know, the Trident I missile is being designed to fit in the existing Poseidon submarines as well as in the new Trident submarines. By retrofitting the Trident I missile in some of the Poseidon submarines, we can improve the overall capability and survivability of the existing SSBN force and at the same time maintain a more economical rate of production for the Trident I.

The IOC of the Trident I missile remains as previously planned, i.e., the fourth quarter of 1978 (the second quarter of FY 1979), which coincides with the IOC of the first Trident submarine. We plan to undertake an advanced development program which will define our capability to improve and measure the accuracy of our SLBMs and which, if implemented by retrofit, could lead to improved accuracy in the future. In addition, the MK 500 MaRV is now under advanced development for the purpose of demonstrating its compatibility with the Trident I missile. This maneuvering RV, however, is not terminally guided since its maneuvering capability is intended to help it evade an ABM interceptor, rather than to increase its accuracy. Indeed, the MK 500 is expected to be less accurate than its ballistic counterpart.

The Trident I IOC date should allow ample time for an orderly missile development and DASO test program. As noted earlier, the OT program cannot be started until the system has been operationally deployed. However, we do plan to conduct OT launches earlier in the Trident program than we did with Poseidon. Backfitting of the Trident I missiles into Poseidon submarines is planned to begin in the third quarter of FY 1979.

This revised program will require a total of \$2,043 million in FY 1975—\$107 million for continued component development of the submarine, \$927 million to complete the funding of the second and third Trident submarines, \$240 million for advance procurement for two Trident submarines per year in FY 1976 and FY 1977, \$662 million for the continued development and minor procurement related to the Trident I missile, and \$107 million in Military Construction funds to continue work on the Trident Refit Facility at Bangor, Washington. In addition, about \$25 million is included in the FY 1974 Supplemental to protect the option for the procurement of two Trident submarines in FY 1975.

Although the Interim Agreement on strategic offensive forces, expiring in 1977, would require us to phase out an equivalent number of existing strategic missile launchers as each new TRIDENT submarine enters sea trials, that decision need not be made now.

NEW SSBN OPTION

Some \$16 million is included in the FY 1975 Budget to initiate design for a new and less costly SSBN than the TRIDENT. This is another application of the high/low mix approach. With a TRIDENT force in being, it is not likely that all of the sea-based force need have the capability provided by the larger and more costly ship.

The current POSEIDON submarines refitted with the new TRIDENT I missile could, of course, fulfill this low end of the spectrum requirement. But because of aging, POSEIDON submarines will have to be replaced at least by the late 1980s and early 1990s. Consequently, more SSBNs, beyond the ten TRIDENT submarines, would eventually have to be built. The design of a smaller, less costly SSBN would give us the option later in this decade to replace the current POLARIS/POSEIDON fleet with a mixed force of high performance and high cost or lower performance and lower cost SSBNs.

The new SSBN would be a somewhat larger than the 640-class (the last class of POLARIS/POSEIDON submarines) and would be powered by a NARWHAL-type reactor. In looking toward a smaller and lower cost SSBN, wherein platform numbers rather than large numbers of tubes per submarine are featured, this new design would have about 16 missile tubes using the TRIDENT I missile. Funds requested cover commencement of a conceptual and feasibility design effort, which will identify cost and characteristics trade-offs.

ABRES

Included in the FY 1975 Budget is \$120 million for the Advanced Ballistic Re-entry Systems Program (ABRES). This program has been the source of much of the advanced re-entry technology incorporated in our strategic missile programs, and to a considerable degree it is responsible for our technological lead in this area. Moreover, ABRES has made a major contribution to our understanding of ABM defense because of its work on a wide variety of ballistic missile penetration aids. Now that the Soviet Union is catching up with us in re-entry technology, we must renew our efforts to stay ahead in this critical aspect of the strategic balance.

The ABRES program is managed by the Air Force, but the work being done also supports Navy and Army projects. In view of its tri-service nature, we have decided to give the Director of Defense Research and Engineering a greater role in the overall direction of the ABRES program. Henceforth, DDR&E will establish the general scope and priorities of the ABRES program and formally review the program twice a year. Following these reviews, DDR&E will provide the Air Force with general and specific guidance, as necessary. The existing ABRES organization structure, which has members of each service as line deputies to the ABRES Program Manager, will be retained to assure that close coordination among the three services is preserved.

B-52 FORCES

The bomber forces are essentially the same as those presented here last year, with two exceptions. First, all of the active B-52D's and F's will be retained through FY 1975. Second, beyond FY 1975 our planned B-52 force of 5 D and 17 G/H squadrons will increase by one G/H squadron (17 to 18). This increase reflects the reorganization necessary to form a composite Combat Crew Training Squadron (CCTS). The UE of each B-52 squadron will be reduced from 15 to 14 to provide aircraft for the CCTS.

Last year the Air Force had planned to start in March 1973 the structural modification of 80 B-52Ds to ensure that the programmed service life can be safely achieved. The program was later deferred, pending approval by the interested Congressional committees. Meanwhile the condition of the B-52D aircraft was found to be worse than originally anticipated. Accordingly, the Air Force has performed a "fracture toughness" program to test the structure of 94 B-52Ds in order to select the best aircraft for proof test, modification, and retention. Including the cost of this special test program, which entails the procurement of proof test jigs, the total cost for the test of 94 aircraft and the modification of 80 aircraft is now estimated at about \$240 million.

Last year the cost of modifying 80 aircraft was estimated at \$197 million. The Congress has approved the use of \$61 million in FY 1973 and prior year funds for initial engineering, plant layout and tooling. Another \$38 million was provided for FY 1974, and \$73 million in procurement funds is requested for FY 1975. The program is now scheduled to be completed by the first quarter of FY 1977.

In my judgment, the B-52D modification program deserves the full support of the Congress, notwithstanding its substantial cost—about \$3 million per aircraft. Recently completed U.S. air operations in Southeast Asia clearly demonstrated the effectiveness of the B-52 in the conventional bombing role. Without the B-52D force, this capability could be provided only at the expense of our strategic capabilities which are already finely balanced in relation to the challenge posed by the Soviet strategic forces.

B-1 BOMBER

Indeed, if we are to continue to maintain an effective strategic bomber force through the 1980's and beyond, as I am convinced we should, we will eventually have to modernize that force. The principal improvements needed are (1) faster airfield escape and greater protection against the effects of nuclear detonations in order to avoid destruction by SLBMs which might be launched on depressed trajectories from Soviet SSBNs operating close to our shores, and (2) a capability to fly at very low altitude at high subsonic speed in order to penetrate improved Soviet air defenses. Although we have no evidence as yet that the Soviet Union is developing depressed trajectory SLBMs, or plans to operate its

SSBNs close to our shores, or will undertake major new air defense programs at home, all of these capabilities will clearly be within its technical competency and economic capacity.

Accordingly, in planning for the 1980s and beyond, we should provide ourselves the option to replace the existing bomber force with a more capable aircraft. The B-1 is being developed for this purpose. It will have a distinctly shorter escape time and much better resistance to nuclear effects than the B-52, and by virtue of its lower flight altitude, greater speed and smaller radar cross-section, it should have a much better capability to penetrate improved Soviet air defenses. Moreover, because of its wider range of altitude and airspeed options, the B-1 will provide greater flexibility in employment than the B-52, thereby enhancing our ability to execute a wide range of attack options in response to potential enemy action.

The B-1 engineering development program, however, has encountered a number of difficulties and delays, necessitating several major adjustments in the program. The latest of these adjustments was reported to the Congress last summer. First flight was rescheduled from April to mid-year 1974. More time was allowed for the fabrication and assembly of Air Vehicles No. 2 and No. 3. The planned production decision date was rescheduled from July 1975 to May 1976.

Last August, shortly after assuming his responsibilities as Secretary of the Air Force, Secretary McLucas appointed a special committee, headed by Dr. Raymond Bisplinghoff, the Deputy Director of the National Science Foundation, to undertake an independent review of the B-1 program. The principal finding of this group of technical and management experts was that there are no major technical problems which preclude the successful development and production of the B-1 aircraft. The Committee noted, however, that the existing program plan would make completion of the development effort and successful transition to the production phase unlikely within projected cost and time schedules. The Committee also expressed the belief that three aircraft would not be sufficient to complete development of a complex program such as the B-1 and allow the final development aircraft to reflect accurately the initial production aircraft.

With regard to schedule and cost, the Committee's best judgment was that a two to three month delay would be incurred in the projected first flight of Air Vehicle #1 and a six to twelve month delay in completion of the total development program. The Committee also estimated that at least \$300 million more would be required to complete the development program as it was rephased in July 1973.

The Committee's major recommendation was that the B-1 program should be restructured to provide for completion of the development effort on a more realistic basis and to provide for a less disruptive transition into the production phase.

Finally, Dr. Bisplinghoff and his associates also furnished Secretary McLucas with their estimates of potential B-1 performance parameters—ranging from Possible, to Most Probable, to Reasonably Adverse. These potential performance deviations result primarily from an increase in the gross take-off weight of the B-1 aircraft, from about 360,000 lbs to the presently projected 395,000 lbs. The Air Force has conducted a thorough analysis of the utility of the B-1 aircraft within the full range of potential performance deviations provided by the Committee. The Secretary of the Air Force, the Chief of Staff, and the Commander in Chief of the Strategic Air Command have concluded that even under the most adverse estimates of performance the B-1 would be operationally effective against the full target spectrum. Moreover, even with the increased weight there are still 100 airfields in the U.S. which would support continuous B-1 operations and an additional 220 airfields which would be suitable for use in emergency dispersal operations. Thus, although some weight reduction should result as a byproduct of engineering changes for purposes of producibility and cost avoidance, there is no requirement for significant changes to the B-1 program solely to regain performance.

A basic problem highlighted by the Committee was the severe program discontinuity which results from the gap of 24 months between first flight and the production decision. The contractor would not be able to retain critical skills and know-how during such an extended gap in effort. Moreover, any plan which was dependent on the recovery of these critically needed personnel after a production decision is made would expose the program to additional technical risks and costs.

Accordingly, in order to facilitate the B-1 test flight test program and to provide a more realistic basis for transition to production, we propose to begin work on Air Vehicle #4 in FY 1975 and, possibly, Air Vehicle #5 in FY 1976. These aircraft would provide needed flight test data 12 to 18 months earlier than would otherwise be possible, and they could also be used to introduce engineering refinements to the basic design.

Although the fourth and possibly the fifth aircraft would be funded with RDT&E funds, they would ultimately be assigned to the SAC inventory. Moreover, the additional aircraft would be built on existing development tooling, modified only as required by aircraft design improvements. Thus, there would be no additional program cost, assuming a subsequent production decision. Nor would these additional aircraft prejudice the production decision. In consonance with our fly-before-buy policy, the B-1 is expected to undergo about two years of flight testing and achieve the essential critical milestones before a production decision is made. Under the currently proposed program plan, this decision could be made in November 1976. The FY 1975 Budget includes \$490 million for the B-1 program.

BOMBER-LAUNCHED MISSILES

The acquisition of the SRAM (Short Range Attack Missile) will be essentially completed with FY 1974 funding and the planned complement of operational (UE) missiles, 1140, will be on hand by the mid 1970s. Because of its relatively poor accuracy and aerodynamic drag on the B-52 G/H, a decision has been made to phase out Hound Dog by FY 1976. The number of Quails will be reduced significantly by end FY 1976.

Last year the Congress was informed of the Defense Department's decision to cancel the SCAD engineering development program and to incorporate further work in that area in a joint Air Force-Navy cruise missile technology program. The Air Force was to concentrate on the development of a small turbofan engine suitable for both an air-launched and submarine-launched cruise missile, and the related high energy fuel. The Navy was to pursue the development of the guidance technology which was to be common to both missile systems.

Planning of this joint technology effort has progressed to the point where we can now present a more definitive program for FY 1975 and beyond. As currently planned, the Air Force would commence engineering development of an Air Launched Cruise Missile (ALCM) in FY 1975, making maximum use of the terminated SCAD engineering program for air vehicle design and small turbofan engine development. The new missile would have about the same overall dimensions as the SCAD so that it could be loaded interchangeably with the SRAM missile, one for one, both internally on the rotary racks of the B-52 or the B-1 and externally on the wing pylons of the B-52. It would weigh about 2,000 pounds and would be equipped with a terrain avoidance system which would permit it to fly just a few hundred feet above the surface of the earth.

The ALCM could be made available for initial deployment in the late 1970s, but it would be premature to make a production decision at this time. In the meantime, we have authorized retention of some of the Quail unarmed decoys.

The Navy SLCM, using the common technology base, would be developed in both strategic and tactical variants, and would be sized to take maximum advantage of the standard torpedo tubes. The strategic version would carry a nuclear warhead about 1500 nm. Like the ALCM, the SLCM would have very good accuracy and penetrate at low altitudes.

While the strategic variant would be primarily a submarine-launched missile, the tactical variant would be designed to be launched from surface ships as well as submarines since it would be primarily a conventionally-armed anti-ship missile. The tactical variant would have a range in excess of 300 nm.

A total of \$125 million has been included in the FY 1975 budget request for the combined cruise missile program—\$80 million for the Air Force ALCM and \$45 million for the Navy SLCM.

ADVANCED TANKER/CARGO AIRCRAFT

It is clear that if we continue to support a large strategic bomber force for any extensive period of time into the future, a new refueling tanker will eventually be required. The cost of acquiring a sufficiently large number of such tankers would undoubtedly be quite high. It may be possible, however, to satisfy that

tanker requirement in conjunction with some other important requirement, such as augmentation of our current airlift capability. Accordingly, we have included \$20 million in the FY 1975 Budget for studies and investigations of alternative approaches to this tanker requirement. The effort will be divided in two parts:

(1) Competitive studies to determine the most effective way to convert a currently available wide-bodied civilian transport aircraft into an efficient military cargo/tanker aircraft.

(2) An initial investigation of the trade-offs between a modified (from a currently available aircraft) and a newly designed strategic tanker/cargo aircraft, with particular emphasis on fast escape and hardness.

2. *Strategic Defensive Forces.*—I believe it is clear from what I have already said that without effective ABM defenses, air defenses are of very limited value against potential aggressors armed with strategic missiles. This interdependency of anti-ballistic missile and anti-bomber defenses has been well understood for many years. But as long as there was some chance that we might deploy at least a thin nationwide ABM defense, it made sense to keep open the option to deploy a complementary air defense. Now that the ABM Treaty limiting both sides to only 100 operational ABM launchers at each of two sites has been signed, the deployment of even a thin nationwide ABM defense has been foreclosed. Indeed, we have deferred all work on the second ABM site for the defense of the National Command Authorities (i.e., the national capital area). Given the very tight defense budget constraints under which we now have to operate, we cannot in good conscience postpone any longer the basic adjustments in our air defense program made necessary by the changing worldwide situation.

You may recall that former Secretary of Defense McNamara in his last posture statement in 1968 set forth six possible purposes that our air defense system might serve in the 1970s:

1. Peacetime surveillance to prohibit free access over North America from the air.
2. Nth country defense to prevent damage from an attack by such countries as Cuba, the PRC, etc.
3. Discourage the Soviet Union from developing and introducing new bomber threats which would be costly to neutralize.
4. Limit damage to our urban/industrial complex from a Soviet bomber attack in the event deterrence fails.
5. Preclude bomber attack on our withheld strategic missile forces.
6. Provide a complete mobile "air defense package", portions of which could be deployed to any part of the world for use in periods of local crisis.

The fourth purpose—limit damage to our urban/industrial complex—is now possible only to the extent that we are successful in limiting the scope of any conflict that did occur. Since we cannot defend our cities against strategic missiles, there is nothing to be gained by trying to defend them against a relatively small force of Soviet bombers. I am sure the Soviet leaders understand that an attack on our cities, whether by bombers or missiles, would inevitably result in the destruction of their cities. Even if the USSR uses all of its ballistic missiles against our strategic offensive forces and reserves its bombers for use against our cities, repeated analyses have convincingly demonstrated that under all foreseeable circumstances we would have sufficient surviving forces to retaliate decisively against Soviet cities. It is this assured capability to retaliate decisively against Soviet cities even after absorbing the full weight of a Soviet nuclear attack that offers the best hope of deterring attack and thus protecting our cities, not our ability to defend them against bomber attack.

The fifth purpose—preclude bomber attack on withheld ICBMs, or bombers, for that matter—might still have some advantage today. That advantage, however, would be seriously eroded if the USSR deploys its new MIRVed ICBMs up to the limits allowed by the Interim Agreement. If it did so, the USSR would have enough ICBM RVs to launch a series of follow-on attacks against our withheld ICBMs. It would also have enough SLBMs for follow-on attacks against bomber bases or against SLBMs in port. Thus, to protect our withheld ICBMs, SLBMs in port, and bomber bases, we would need a balanced defense against both missiles and bombers. Such a defense is foreclosed by the ABM Treaty.

With regard to the third purpose—discourage the USSR from introducing new bomber threats—I believe we should continue to pursue a broadly based R&D program in the strategic air defense area. That program, however, should be focused on basic research and the advancement of technology, rather than on

engineering development of new weapon systems. We already have a number of new and expensive air defense weapon systems developed or under development for general purpose forces applications—e.g., F-15, F-14 (Phoenix), AWACS, SAM-D. But we must take care not to fall behind the Soviet Union in basic knowledge and understanding of the air defense problem. We need this knowledge and understanding, in any event, for our bomber programs. And, we should in prudence hedge against the possibility that a technological breakthrough or some other change in the strategic situation might make the deployment of new systems for continental air defense both feasible and desirable.

The first and last purposes—peacetime surveillance and control and mobile air defense forces—and to some extent the second purpose, Nth country defense—are still feasible and necessary. We must, as a very minimum, ensure the sovereignty of our air space; it would also be very helpful to have available a mobile air defense capability which could be deployed promptly overseas.

Forces provided for the first purpose would also provide a reasonable level of defense against the unlikely contingency of an Nth country air attack on the United States, most conspicuously Cuba. We have no reason to believe that Cuba has nuclear weapons or is likely to acquire any in the foreseeable future. Furthermore, Cuba's air force is very limited in payload and range; it could reach only the southeastern part of the United States. Finally, the consequences to Cuba of a surprise air attack on the United States would be so grave that the chances of its occurrence must be rated at near zero. With regard to the PRC, we have no evidence whatsoever that that nation is seeking an intercontinental bomber capability.

The first purpose requires only a thin area-type defense plus a high quality surveillance capability. Accordingly, we now propose to phase out all of the strategic Nike-Hercules batteries (which are all located around nine urban areas) and eventually reduce the interceptor force to 12 squadrons—six active and six Air National Guard (ANG). The Nike-Hercules batteries and their Fire Coordination Centers will be phased out by the end of FY 1975. Also in FY 1975, the active interceptor force will be reduced to six F-106 squadrons, and two F-106 squadrons will be added to the Air National Guard, for a total of six F-106 ANG squadrons. Seven ANG F-102 squadrons will be phased out in FY 1975. Current planning for FY 1976 includes phase-out of the remaining F-102s and evaluation of the continued utility of the F-101. Pending a review of the retention of F-101s, these six interceptor squadrons will be retained until the end of FY 1976.

In addition to these strategic air defense forces, we will have one active Air Force air defense squadron (F-4s) and three active Army Nike-Hercules batteries in Alaska, and one ANG air defense squadron (F-102s converting to F-4s in FY 1976) in Hawaii. (Canada has a number of CF-101 air defense squadrons operational.) We will also continue in place the active Army general purpose forces Nike-Hercules and Hawk batteries now operational in Florida. In addition, there will always be other general purpose air defense forces available in the U.S.—fighters and SAMs, and eventually some tactical AWACS—which could be used to augment the strategic air defenses in a crisis. And, of course, we will continue to have the option to deploy a new interceptor (e.g., F-15 or F-14) and a new SAM system (e.g., SAM-D) for CONUS defense, since those programs are being pursued in any event for the general purpose forces.

A CONUS air defense system structured primarily for peacetime surveillance would not require an AWACS force, the principal purpose of which is to provide a survivable means of control of air defense aircraft in a nuclear war environment. However, as I noted earlier, a mobile air defense force which could be deployed quickly as a "package" would still be extremely useful in support of our general purpose ground and air forces overseas. We proposed, therefore, to retain the AWACS (now designated E-3A) program for that purpose, and I will discuss it later in context with the general purpose air forces.

The Defense Department has been working for a number of years with the Federal Aviation Administration to consolidate the military and civilian radar and control centers in CONUS into a common, jointly operated system designed to serve both military and civilian needs. This work is still going on. Nine joint-use surveillance radars are now in operation. In FY 1978, joint-use radars will replace all military surveillance radars in CONUS. These U.S. radars, and possibly some of the Canadian radars near the border, will feed into 13 USAF/FAA Joint Control Centers; the first four will be operational by end FY 1977 and all

13 by end FY 1979. The six existing Regional Control Centers (SAGE) will be phased out in FY 1978. A new command and control plan tailored to the revised air defense structure and missions is now under development by the Air Force.

As the new joint system becomes operational, one of the two CONUS manual Control Centers and the last CONUS Buic III Control Center (in Florida) will be phased out. All of the remaining airborne radars will be phased out by end FY 1977. Although no changes are planned through FY 1979 in the surveillance radars and control systems in Alaska and Hawaii, the Air Force is currently investigating the feasibility of employing CONUS Buic assets for the semi-automation of the Alaskan air defense systems.

OTH-B

For deployment in the 1980's we propose to continue work on the development of the Over-the-Horizon Backscatter (OTH-B) radar, for which \$12 million is included in the FY 1975 Budget. This radar promises to extend the early warning capability against bombers. Three such radars—one each on the East and West coasts, and one covering the southern approach—would give good coverage on all except the northern approach to the U.S. For the northern approach, we will have to retain the 31 DEW line radars until such time as we can perfect an OTH radar, or some other system, which can operate successfully in the presence of the intense electrical disturbances which characterize the northern auroral zone.

SAFEGUARD

As my predecessor, Elliot Richardson, reported to you last year, we plan to complete deployment of the one remaining Safeguard site at Grand Forks for defense of Minuteman. Work at all other sites has been terminated. The \$61 million included in the FY 1975 Budget for development of Safeguard is principally for completion of the check out and installation of the software; funding for procurement, military construction and system flight testing was essentially completed with the FY 1974 Budget.

The Grand Forks site with 30 Spartan and 70 Sprint launchers, one Missile Site Radar (MSR) and one Perimeter Acquisition Radar (PAR) is scheduled to be completed in FY 1975. The equipment readiness date is still estimated to be October 1974, and an initial operational capability is expected to be achieved by June 1975.

The Safeguard system test program at Kwajalein Atoll in the Pacific is proceeding very satisfactorily. In the first Safeguard system test series (1970-71), 12 out of 16 tests were successful, 2 were partially successful and 2 were unsuccessful. In the second series, which will now be concluded in July 1974, 33 tests were conducted through December 1973—30 were successful and three were unsuccessful. Seven tests remain to be completed, but some of these may be omitted if the current test objectives can be met with fewer tests.

SITE DEFENSE

Included in the FY 1975 Budget is \$160 million to continue work on the Site Defense Program, the objective of which is to demonstrate a development prototype ABM system specifically designed for the defense of Minuteman. I believe this program is a prudent and necessary hedge. It would give us the option to defend our Minuteman force against a Soviet ballistic missile attack should that become necessary, or in the event that an acceptable permanent agreement on the limitation of strategic offensive arms cannot be achieved. It would also give us the option to deploy a more advanced ABM system for the defense of the National Command Authorities, if that should be found desirable some time in the future.

The Site Defense Program will be conducted on a very austere basis. It must be borne in mind, however, that Site Defense must be developed with "system" applications in mind, if the demonstration of the development prototype is to be of any real value. Development of the hardware, e.g., the improvements to the Sprint missile, the new small (relative to the MSR) radar, and the data processors is well within the state of the art. What needs to be demonstrated is the capability of the system as a whole, including in particular the software.

ADVANCED BMD TECHNOLOGY

We also plan to continue the Advanced Ballistic Missile Defense Technology effort at about the same level as in recent years, and \$91 million is included in the FY 1975 Budget for that purpose.

The rationale for continued research and development in BMD, as well as re-entry systems (ABRES) technology, is founded on two specific SALT related objectives. One is to provide the Soviet leaders with strong incentives to negotiate additional strategic arms limitation agreements. The other is to motivate them to keep the treaties and agreements already made.

Nations make treaties, and nations keep treaties, only when they regard such actions to be in their best interests. If the Soviet leaders believe that they could gain an advantage over us in the absence of an agreement, they would have no incentive to reach agreement. But if we confront them with the prospect that even with strenuous efforts on their part they would not be able to shift the strategic balance in their favor, they would have an incentive to reach agreement on maintaining the balance, if for no other reason than to save money. Similarly, if we fail to advance our ABM technology while the Soviet Union continues to pursue its on-going ABM development programs, which are clearly permitted by the Treaty, the Soviet Union might achieve a position where, by abrogating the Treaty, it could shift the strategic balance drastically in its favor before we could react.

Consequently, we must continue to pursue ABM technology programs of sufficient breadth and depth to ensure that we can:

- Keep our qualitative lead in ABM technology over the Soviet Union.

- Understand and assess Soviet ABM activities which our intelligence sources reveal to us.

- Achieve the knowledge and skill needed to deploy an effective ABM system if that should become necessary.

SATELLITE AND SLBM RADAR WARNING SYSTEMS

For surveillance and early warning of ballistic missile attack, we now depend on a variety of systems. The most important of these is the satellite warning system. We now maintain on station one satellite over the Eastern hemisphere and two over the Western hemisphere.

The Eastern hemisphere satellite would provide the first warning of a Soviet (or PRC) ICBM launch. This warning would be verified first by the forward scatter Over-the-Horizon (OTII) system and then by the Ballistic Missile Early Warning System (BMEWS). The capability to correlate data from BMEWS, satellite and other sources will provide highly credible warning of ICBM attack.

The Western hemisphere satellites provide the first warning of SLBM launches against the U.S. Complementary warning coverage is now supposed to be provided by the 474N SLBM "dish" warning radars. Unfortunately, these 474N radars—four on the East Coast, three on the West Coast, and one on the Gulf Coast—have limitations against Soviet SLBMs, particularly the new longer range SS-N-8. Moreover, there are a number of limitations in the current satellite coverage—it does not fully encompass all of the areas from which the SS-N-8 could be launched, it is susceptible to temporary solar induced outages which may cause some loss of coverage in those areas not covered by both Western Hemisphere satellites, and it is not entirely free of false alarms. To provide full coverage of the expanded SLBM threat area, and ensure prompt verification of the satellite data, we must have a more effective and reliable complementary warning system than the 474N radars.

Accordingly, we again propose to replace those radars (including the standby SLBM warning radar at Moorestown, N.J.) with two new SLBM Phased Array Warning Radars—one on the East Coast and one on the West Coast. These much more reliable and capable phased array radars, together with the Western Hemisphere satellites, would provide highly credible warning of a Soviet SLBM launch against the U.S. First warning of such an attack would come from the satellites, and within a very short interval, which increases with the distance the launching submarine is from our coast, verification of the attack would come from the SLBM phased array radars.

The phased array radars would not only verify the signals received from the satellites but would also fill in any gaps which may occur in the satellite coverage as a result of solar reflections. The additional confidence which we would gain in the reliability of the warning would, in my judgment, be worth the acquisition cost of the two radars—now estimated at approximately \$100 million.

The FY 1975 Budget provides for further improvements to the satellite system and includes \$50 million to begin acquisition of the SLBM phased array radars.

3. *Command and Control.*—Continuity of command and control of the strategic forces by the National Command Authorities—before, during and after a nuclear attack on the United States—is a basic tenet of our national security policy. This means that we must not only ensure, to the best of our ability, the survival of the NCA and their principal advisors, but also the minimum essential communications links with the subordinate commands and the operating forces.

The command and control of U.S. military forces worldwide is normally conducted through the Worldwide Military Command and Control System (WWMCCS). The national level elements of this system include the National Military Command Center (NMCC) at the Pentagon, the Alternate National Military Command Center (ANMCC), and the National Emergency Airborne Command Post (NEACP) based at Andrews AFB, Maryland. The President, no matter where he may be—in the White House, Camp David, San Clemente, Key Biscayne, or airborne in the Presidential aircraft—is always kept in continuous communication with the NMCC, and through it, with the alternate national military command centers, the subordinate commands and the military forces.

These national military command centers are linked to the subordinate commands and the military forces worldwide by a wide variety of communication modes—land lines, underwater cables, VLF, LF, HF, UHF radio, satellite relay systems, etc. During the next few years we propose to increase significantly our efforts to improve the security and survivability of these WWMCCS supporting communications networks, particularly that portion designated as the Minimum Essential Emergency Communications Network (MEECN). MEECN is the basic system for communicating executive orders to our forces in wartime. Consequently, special attention must be given to its survivability under nuclear attack.

With regard to the strategic offensive forces, connections between the national level command centers and the Strategic Air Command and its forces are provided through a deliberately redundant system of communications and command posts. SAC, in addition to its principal command post at Omaha, Nebraska, also maintains two alternate ground command posts and one airborne command post. The SAC airborne command post is in continuous communication with the SAC command post at Omaha. On receipt of warning of a nuclear attack on the United States, the SAC airborne command post would be linked to the SAC forces and the national military command centers, including the NEACP, by the Post Attack Command and Control System (PACCS). One of the PACCS components, the Mid-AUXCP, can assume the CINCSAC function in the event that the primary SAC ABNCP is inoperable.

The national military command centers are linked to the sea-based strategic missile forces, either through the appropriate subordinate commands or directly, by means of a deliberately redundant system of Navy radio transmitters and by the Tacamo relay aircraft. To maximize the survivability of communications from the NCA, these Navy transmitters (including Tacamo) can also be reached via those communications links involved in directing SAC forces. Messages could also be relayed to the ballistic missile submarines via ships at sea, communication satellites, Loran, etc.

This system of command and control of the strategic offensive forces, however, is not now as survivable as the forces themselves. That is why the Defense Department has proposed, in addition to the improvements in the existing communications network, the continued development and deployment of the Air Force Satellite Communications System (AFSATCOM), the Advanced Airborne Command Post (AABNCP) aircraft, and the Sanguine extremely low frequency (ELF) radio relay site. These three programs offer the best prospects, at this time, for a substantial advance in the survivability and effectiveness of our national command and control system under nuclear attack.

AFSATCOM AND SURVSATCOM

The AFSATCOM system, when fully deployed, will consist of a combination of special communications transponders and channels carried on board "host" satellites placed in orbit for other missions (e.g., Navy FLTSATCOM satellites) plus numerous ground and air terminals. This deliberately redundant satellite system will not only provide greater assurance that essential NCA instructions reach our forces, it will also enable the forces to report back the data needed by the NCA to maintain sure control and to execute a variety of nuclear options. We are also developing the technology needed to improve further the survivability of strategic communications satellites. This technology will lead to a new Survivable Satellite Communications (SURVSATCOM) system which should be available by the time it is appropriate to replace the AFSATCOM system sometime in the 1980s. Funding for AFSATCOM is included in other programs. Funding of SURVSATCOM as a separate program element is expected to begin in FY 1976.

AABNCP (E-4)

The AABNCP program, as currently planned, would be pursued in several stages geared to our growing understanding of the command and control problem in a nuclear war environment, and to the further development of applicable technology. It should be borne in mind in this connection that the aircraft itself (the Boeing 747, now designated the E-4) presents no particular technological problem. It is the equipment which goes into the aircraft that is our principal concern in this program. We would expect the aircraft to have a useful life of about 20 to 25 years. During that period, we would probably re-equip the aircraft, in whole or in part, as new technology becomes available and as changes in national policy dictate new missions to be accomplished by the strategic forces.

Accordingly, the longer range equipping program has been divided into "blocks". Block I is the currently approved configuration of the AABNCP. The airborne computer, which was associated with the original configuration of the AABNCP aircraft, has now been deferred from Block I to Block II.

I believe this deferral is a sensible move; the problems involved in an airborne automatic data processing (ADP) system have not yet been sufficiently resolved. The airborne ADP system must be compatible with the ground-based WWMCCS ADP system, since selected portions of the ground data base must be readily transferable to the airborne ADP. We are currently investing substantial funds in the modernization and standardization of this ground-based ADP system. Unfortunately, the ground ADP equipment cannot be used directly in the AABNCP aircraft because that equipment has not been designed for aircraft operations. Also, further research must be done on shielding airborne computers against nuclear effects, particularly when the aircraft is airborne.

Finally, we have yet to formulate precisely which portions of the WWMCCS ground data base are actually required in the AABNCP. This would depend largely on how one would conceive the NCA function aboard the NEACP aircraft and the SAC commander's function aboard the SAC airborne command post. If the NCA is to be in a position to exercise a choice among a wide range of nuclear attack response options, including some which may not have been pre-planned, the data required aboard the aircraft would be quite extensive. In the case of the NEACP, it would probably include status of forces and damage assessment information for both sides (U.S. and the attacker), status of allied and other national forces, and so forth. The SAC airborne command post might require even more detailed data, e.g., location and status of spare engines, reload weapons, fuel supplies, missile spare parts, maintenance capabilities, etc.

But even without the airborne ADP, the E-4 with the new Block I C³ equipment (including antennas and terminals for satellite communication) and the greater available space, longer endurance, shorter takeoff, and other features, will greatly enhance our command and control capabilities under nuclear attack, as compared with the existing EC-135s. The new and more powerful communications equipment will help to overcome interferences caused by a nuclear environment or jamming, as well as provide an interface with both the AFSATCOM satellite system and the Defense Satellite Communications System (DSCS). Moreover, the E-4 will have a computer terminal through which it can connect

directly into the WWMCCS ground-based ADP system. It can thus acquire the latest data as long as the ground-based system continues to function. Thereafter, it would have to operate in a manual mode, using whatever data is already aboard plus updating by direct communications with the subordinate commands. The additional space would accommodate the larger staffs required for manual operations.

In order to provide an interim NEACP capability with the new aircraft, pending the development of the Block I C³ equipment, the first three operational aircraft will be equipped with the existing C³ package to be transferred from three EC-135s. The first two operational aircraft, designated E-4A and the one R&D aircraft, designated E-4B, were funded in the FY 1973 Budget. A third operational E-4A aircraft was funded in the FY 1974 Budget. The three operational E-4A aircraft constitute Phase 1A of the Block I program.

Phase 1B provides for the development of the Block I advance C³ package and for the acquisition of three operational E-4Bs, complete with the new C³ package, for the NEACP function. The \$90 million requested for FY 1975 includes \$58.8 million to continue the development of the Block I C³ package, \$22.3 million for the construction of new facilities for the E-4A aircraft and alert crews, and \$9 million for the initial increment of the Block II program. The Block II funds would be used to initiate the definition of the airborne ADP system and such further improvements in the communications capabilities of the E-4B as may be found technically feasible, desirable and cost effective. Procurement of the three operational E-4Bs, with the Block I advanced C³ package, would be funded in FY 1976 and would complete Phase 1B.

Phase 1C of the Block I program involves the retrofit of the first three E-4A aircraft with the Block I advanced C³ package.

The total cost of the Block I program is now estimated at about \$550 million. The cost and timing of the Block II program cannot now be estimated since it has yet to be fully defined.

SANGUINE ELF

The SLBM force, when at sea, is still the element of our strategic offensive forces least vulnerable to sudden nuclear attack. The communication links from the NCA to the individual ballistic missile submarines, however, are less survivable than the submarines themselves. Hence, we must make every feasible effort to ensure reliable communications with the SLBM force under all foreseeable circumstances.

The Sanguine Elf system, in the present state of our knowledge, still holds the best promise of providing such a survivable communications link with our ballistic missile submarines. The Sanguine transmitters would increase the number of aimpoints the Soviets would have to attack if they were to attempt to disconnect communications to our submarines and have a reasonable assurance of doing so. The Sanguine signals would decrease susceptibility of our communications to atmospheric disturbances and enemy jamming. Sanguine would also improve the survivability of the submarines themselves by removing them and their antennas from the near-surface environment. Moreover, notwithstanding popular fears to the contrary, the Sanguine system would pose no known environmental, ecological, or biological dangers to the area in which it is installed.

The need for a more survivable communications link to our ballistic missile submarines is clear, and the technical feasibility of the Sanguine system has been reasonably well demonstrated during the four years of work at the Wisconsin test site. In view of the fact that we have no better alternative on hand, I strongly urge this Committee to support the Sanguine program. We need not decide on the location of the operational site at this time, but we should press forward with the development of the system and prototype testing at the existing Government test sites. Concurrently, we should conduct a comparative analysis of all potential sites with a view to making a final recommendation before the operational system is ready for deployment. A total of \$13.2 million has been included in the FY 1975 Budget for the continuation of the Sanguine program on this basis.

4. *Civil Defense.*—The shift in our strategic deterrence policy which I discussed at the beginning of this section does not diminish the need for a vigorous Civil Defense Program. A Soviet counterforce attack which deliberately avoids our cities—for example, a large scale attack on Minuteman—would still produce

a large amount of nuclear fallout which could drift over our cities. It would be highly desirable, therefore, to continue our efforts to identify additional fallout shelter spaces for our population.

We expect to identify about eight million more shelter spaces per year, principally from new construction. We do not plan, however, to stock any more shelter spaces with Federal resources; we now have about 108 million spaces stocked for eight days usage. Instead, contingency planning will be continued by State and local governments to complete expeditiously the stocking of all identified spaces from locally available resources in the event of an intense international crisis.

Since it is quite possible that a period of intense crisis would occur before an attack, it may be feasible to relocate non-essential personnel from cities and high risk areas during such a period. Accordingly, some preliminary contingency planning is being undertaken for this purpose, including:

The designation of high risk areas.—Through our Civil Defense Regions and in cooperation with the States, unclassified maps depicting areas deemed to be at high risk from the direct effects of nuclear weapons are being developed. These maps assume military installations and industrial and population concentrations would be high value targets. Consideration is also being given to the designation of those areas which may be subjected to high levels of fallout as high risk areas.

Development of plans for relocation of the population in a crisis.—As the first step in crisis relocation planning we are developing allocation schemes to permit the population from some 250 of our urbanized areas to be assigned to appropriate host areas. The primary end product of this first step is expected to be the publication of information materials for distribution to the public in periods of severe crisis. These publications would advise the public "where to go and what to do" should relocation be implemented. Training of DCPA personnel and State and local personnel in handling relocation is currently underway. During the later portion of fiscal year 1974 we will be conducting some eight to ten pilot projects to provide on-the-job experience and to field test techniques. Concurrent with the pilot projects, research and development efforts will be initiated to provide planning guidance for State and local planning of, inter alia, food distribution during the relocation period, provision of fallout protection in host areas, and emergency services support.

The implementation of an "all effects" shelter survey.—The survey is designed to identify the best shelter protection available from fallout in all areas, and from the direct effects of nuclear weapons in high risk areas. This data will provide a basis for in-place shelter plans and also should provide input for shelter plans for both the "key operating personnel" who would be located in target areas after implementation of relocation plans, and the evacuated population in host areas. The survey data should be useful for identifying the need to upgrade existing shelter and the usefulness of expedient shelter measures.

The ability to conduct coordinated emergency operations must exist where the people are located—i.e., in the local jurisdictions throughout the United States. This means that the Federal Government must continue to meet its responsibilities under the Federal Civil Defense Act of 1950, as amended, to provide leadership, guidance and assistance to the State and local governments.

Development of civil defense capabilities which are essential to our national security also generates, as a bonus, an improved readiness on the part of State and local governments to conduct coordinated operations in peacetime emergencies and disasters. This peacetime capability is a secondary, but important, objective of the Civil Defense Program.

Included in the FY 1975 Budget is a total of \$86.3 million for the Civil Defense Program. Of that amount, \$9 million will be required for the shelters program, \$40.3 million for financial assistance to State and local governments, and the remainder, \$37 million, for related supporting programs such as training and education, attack warning, and radiation detection.

III. GENERAL PURPOSE FORCES

The resources that we commit to the general purpose forces constitute by far the largest part of the Defense budget. Not only do they include most of the Army, Navy, Marine Corps forces, they also cover the tactical units of the Air Force, all of our airlift and sealift and most of our National Guard and Reserve

forces. Our security assistance programs go to the support of the general purpose forces of other nations. In addition, a substantial share of our outlays on intelligence and communications, and research and development, as well as a large percentage of our indirect support programs, are attributable to our general purpose forces. Although there is no precise way to allocate many of these costs, we estimate that more than 70 percent of our Defense expenditures is attributable to the general purpose forces and activities related to them.

A. THE NEED FOR GENERAL PURPOSE FORCES

The allocation of such a large proportion of the Defense budget to general purpose forces may seem perverse in what has come to be known as the nuclear age, but there are a number of powerful reasons for it. With the rise of Soviet nuclear power, which has brought about an approximate parity in U.S.-Soviet nuclear capabilities, the relative contribution to deterrence made by our own strategic forces has inevitably declined, even though these forces continue to have a unique and indispensable role.

In an era of world-wide U.S. interests, power politics and nuclear parity, it is preferable to deter or to repel limited threats by limited means. To do that requires a capability to place boundaries on conflicts and exercise some degree of control over the escalation of violence in the event that deterrence should fail. The general purpose forces, it is generally agreed, are best suited to these purposes.

1. *The Role of Theater Nuclear Forces.*—Of the resources we invest in the general purpose forces, almost all go to conventional rather than to our tactical nuclear capabilities. In part, this is so because many of our delivery systems—artillery, short-range missiles, and tactical aircraft—are dual-capable, and therefore the distinction between their nuclear and their conventional role is not clear cut. But in greater part, it is because our forces, in their conventional role, can be used more flexibly, and contribute more to our critical defense posture and to the world-wide military equilibrium we seek.

While it is essential to theorize about the nature of tactical nuclear warfare, we must acknowledge that as a practical matter, the initiation of a nuclear engagement would involve many uncertainties. Acceptable boundaries on such a conflict would be extremely difficult to establish. A nuclear engagement in the theater could well produce much higher military and civilian casualties and more widespread collateral damage than its non-nuclear counterpart, depending, of course, on the character and length of the engagement. What is more, it is not clear under what conditions the United States and its allies would possess a comparative military advantage in a tactical nuclear exchange.

Why, then, do we maintain such large and diversified nuclear capabilities in our main theater commands? The answer is threefold. First, maintaining these capabilities is essential to deterrence so long as opposing forces maintain similar capabilities. They help to deter a limited first-use of nuclear weapons by an opponent and along with the conventional and nuclear forces, help create a general deterrent against either conventional or nuclear aggression. Second, should deterrence fail, the tactical nuclear capabilities provide a source of nuclear options for defense other than the use of the strategic forces. Third, given our doctrine of flexible response, we do not preclude the use of nuclear weapons by the United States and its allies in order to prevent a successful aggression.

There are, in other words, ample grounds for the continued maintenance of tactical nuclear weapons. I do not wish to argue, however, that our current posture—particularly in Europe—is ideal or that we do not need to improve it in a number of respects. To the contrary, it is already evident that we must, at a minimum, improve the survivability of these systems and upgrade their command and control.

At the same time, I must stress that our tactical nuclear systems do not now and are most unlikely in the future to constitute a serious substitute for a stalwart non-nuclear defense. In fact, we must recognize in our planning that the decision to initiate the use of nuclear weapons—however small, clean, and precisely used they might be—would be the most agonizing that could face any national leader. Accordingly, we and our allies must keep strong conventional forces at hand. Tripwire strategies or a “planned insufficiency” of non-nuclear capabilities are not sufficient for credible deterrence.

2. *Sizing the General Purpose Forces.*—While the basic justification for the general purpose forces is generally understood and accepted, it is more difficult to determine the size, composition, and deployment of these forces. This is regrettable but hardly surprising, for the process of establishing requirements (both quantitative and qualitative) does not lend itself to the simple mathematics of the strategic nuclear exchange.

Of course, one way to dispose of the sizing problem is simply to produce a carbon-copy of the main threats. To adopt such a course, however, would impose impossible demands on our resources, overlook the facts of allies and geography, and ignore such phenomena as the Sino-Soviet split. Right now, for example, the USSR deploys nearly a fourth of its ground forces in the vicinity of the PRC's borders; unless the political situation in the Far East changes quite dramatically in the near future, it would be conservative planning at its worst (and most expensive) to count these forces as part of the threat to NATO which would necessitate countervailing forces of our own there.

A more complex but at the same time more practical procedure is to define theaters of vital interest to the United States—theaters such as Europe, the Middle East, Southeast Asia, Korea, Japan, and essential sea lanes—estimate specific threats that could materialize in these theaters and the contributions of allies, and then determine what forces we should provide to maintain an equilibrium. Once that is done, we can go on to decide how many of these contingencies might arise simultaneously.

Obviously, such a procedure is not without its problems. For example, how appropriate is this kind of planning in an era of detente—and what is the alternative to some form of capabilities planning? If specific contingencies are selected as the basis for determining our requirements, what evidence do we have that they, rather than some unanticipated event, will occur? And what is to prevent such planning from degenerating into an effort to anticipate every eventuality, however remote?

I confess that there are no easy answers to these questions. But to pretend that efforts at detente have suddenly made the world a safe place for our citizens and their pursuits would be to fly in the face of recent evidence to the contrary and ignore the role of the general purpose forces in producing deterrence, stability and the possibility of going beyond detente to a more durable peace. The time has not yet come, in short, to abandon capabilities planning.

a. The planning process

To overcome the drawbacks of capabilities planning, and particularly to keep our force requirements from becoming open-ended, we have developed a planning algorithm which makes the general purpose forces the function of several factors, namely:

Our analysis of the most demanding contingencies that could arise in theaters of primary interest to the United States and the requirements they would levy on allied and U.S. forces;

A determination of the number of contingencies, considering the international situation, that might occur more or less simultaneously and for which we should have active and reserve forces available;

The initial strategy that we and our allies should adopt, such as forward defense;

The length of the initial phase of the conflict and its implications for the mix of active and reserve forces, strategic mobility, anti-submarine warfare (ASW), and logistics.

To the extent that this planning algorithm has become a matter of public knowledge, it has been used in a somewhat mechanical fashion primarily to advocate a reduction in general purpose forces. To avoid future misunderstandings about its application, a number of points about the algorithm should be kept in mind.

Its purpose, in focusing on selected theaters and contingencies, is not to prepare only for those eventualities. Rather, the objective is to discover what we would need if major challenges occurred in areas of vital interest to the United States. Once this need is determined, the general purpose forces can be sized to these very demanding contingencies. With these baseline forces established, we should then have in hand the capability both to deal with other contingencies

that arise and to perform a variety of other functions in support of our foreign policy.

This means, in turn, that once we have established our baseline requirements, we should test their adequacy against a number of "off-design" cases to see whether what can lick the cat can also lick the kitten. Indeed, we have recently had just such a test thrust upon us—and a very empirical one at that—in the form of the Middle East war. As it turned out, our attack carriers (used as enroute airfields) and our strategic airlift, bought for quite other purposes, proved themselves very smartly and efficiently in an "off-design" contingency.

b. The strategic concept

In the 1960's, as a result of this planning process, we adopted a strategy and force structure that purportedly enabled us to deal simultaneously with the initial stages of a war in Europe, a war in Asia, and a minor contingency elsewhere. Since 1969, with explicit acknowledgement of the Sino-Soviet split and the President's opening of detailed negotiations with both the USSR and the PRC, the strategic concept has been changed in the following major respects.

We now plan our forces to deal with a major conflict in Europe or Asia and to respond simultaneously to a minor contingency elsewhere. Thus, we have dropped one of the big contingencies for which we must be simultaneously prepared and have adopted, in the jargon, a 1½ war strategy instead of the 2½ war strategy of the 1960's.

The change in strategic concept has accompanied the reduction in the baseline general purpose forces. The principal change was the reduction in the number of active Army divisions from 16½ in 1964 to 13 in 1973. (Although the number of naval combatants has also declined substantially, the result is more a function of budgetary constraints and the retirement of obsolescent ships than of the changes in strategy).

The U.S. withdrawal from Vietnam, the Nixon Doctrine, and the modified strategic concept—accompanied by these reductions in active forces—have led to the recurrent expectations that large savings in the budget for the general purpose forces could be realized. Yet in current dollars, the costs of the reduced general purpose forces have continued to rise. Part of the reason for this seemingly perverse effect is, of course, inflation and the disturbingly rapid increase in the price of new weapon systems. But the most important factor has been the increased cost of manpower as we have adopted pay comparability and phased out the draft. As a consequence, we have to recognize that:

The general purpose forces tend to be manpower-intensive so that unit costs are bound to be higher than they were a decade ago;

Substantial general purpose forces will nonetheless be required if we are to maintain a worldwide equilibrium and at the same time avoid increased reliance on nuclear weapons;

Even so, we still need to practice greater efficiency in the utilization of the manpower that we acquire.

3. The Planning Contingencies.—The strategic concept determines the overall requirement for general purpose forces. But the planning contingencies are what generate the specific demand for divisions, air wings, war reserve stocks, strategic mobility and naval forces. The two contingencies that constitute the main basis for force planning are:

An attack on NATO by the nations of the Warsaw Pact, led by the USSR;

An attack in either Northeast or Southeast Asia with the direct involvement of the forces of a major power.

While these may be considered unlikely contingencies, we find them useful for several reasons:

They provide a measure of the threats that could be deployed against us.

They take account of allied contributions in key theaters.

Their low probability may well be a function of the fact that we prepare for them.

They provide the principal variables that determine the qualitative aspects of our forces.

a. The Center Region of NATO

The most demanding feature of the NATO contingency is the potential threat to the Center Region. It creates two sets of risks for the Alliance. The first is

the danger of surprise attack launched by the deployed forces of the Warsaw Pact. The second is the possibility of an assault after a period of mobilization and deployment by the Pact.

(1) The deployed threat

We estimate that the forces which the Pact could launch against the Center (that is, the Federal Republic of Germany) with very little warning consist of:

The 27 divisions deployed by the USSR in East Germany, Poland and Czechoslovakia;

The 31 divisions deployed by East Germany, Czechoslovakia and Poland;

About 2,800 aircraft, of which the majority are primarily air-to-air fighters.

These 58 divisions represent a very immediate and palpable threat to the Center Region. Moreover, we believe that the 27 Soviet divisions (which do not include the four Soviet tank and motorized rifle divisions in Hungary) constitute a much larger force than would be required by any defensive mission in Eastern Europe. The more than 8,000 tanks which we estimate these Soviet forces to possess further underlines their offensive potential. It should be recalled, however, that:

Warsaw Pact division forces are substantially smaller than their NATO counterparts;

Deployed Pact manpower in these ground forces amounts to about 925,000 men;

The Warsaw Pact maintains less of its logistics structure in peace time than does NATO.

To counter this immediate threat, NATO has in the Center Region of Europe about 29½ divisions and more than 2,700 aircraft in a roughly comparable area of Western Europe. The total includes five French and 4½ United States divisions (but not our Berlin brigade or two armored cavalry regiments). Manpower in ground forces amounts to about 770,000, including French forces in Germany. Around half of our tactical aircraft are fighter-bombers.

As a consequence of these deployments, there is an approximate balance between the immediately available forces of NATO and the Warsaw Pact in the Center Region. The Pact has an advantage over NATO in the number of men in ground forces. The Pact also has a large numerical superiority in tanks (about 15,500 to 6,000 for NATO). But NATO possesses important quantitative or qualitative advantages in tank destroyers, antitank weapons, trucks, logistic support, and—most important of all—modern fighter aircraft.

Our Army forces in West Germany and our tactical air wings in West Germany and the United Kingdom make a vital contribution to the maintenance of this balance in Central Europe. They constitute about one-fourth of the total ground forces and the modern fighter attack aircraft in the Center Region.

As the arithmetic of the situation demonstrates, the Pact has some quantitative advantages. Unilateral withdrawals of United States ground and tactical air forces from Europe, despite the continued massive Soviet presence, could begin to tilt what has proven to be a relatively stable balance dangerously in favor of the Warsaw Pact.

In the circumstances, I cannot in good conscience recommend that we take out units short of an agreement with the Pact on mutual and balanced force reductions. Whatever their other roles—and they are important—the United States forces in Europe, in their current size and composition, perform a critical military function, and it is much more than to serve as part of a tripwire. They are sized to help maintain a stalwart conventional defense against an attack by the Pact after little warning, and I believe that mission continues to be essential despite the steps we have taken toward detente.

To stress the importance of the United States contribution to the defense of Western Europe, and to the maintenance of a conventional balance of deployed power between NATO and the Warsaw Pact, is not to argue that we can be complacent about the situation in the Center Region as it now exists. The Soviets continue to add to and improve their capabilities there. And, as I have stressed to our allies in NATO, the relative weight of the European contribution to the common defense needs to increase still further. Our confidence in the balance, which is not yet very high, must also be strengthened by a series of specific improvements in the allied posture. In particular, I have proposed:

Actions to reduce the balance of payments and budgetary costs of current U.S. deployments so that we can comply with the Jackson-Nunn Amendment and at the same time avoid unilateral troop withdrawals;

Measures to increase our defense effectiveness which include an expanded program of aircraft shelters, improved coordination among allied tactical air

forces, more antitank weapons, and a more substantial position in war reserve stocks.

(2) *The mobilized threat*

The adoption of these and other programs does not signify any change in basic NATO strategy; nor does it preclude the use of nuclear weapons should a Pact assault prove of overwhelming weight and speed. However, our efforts should contribute to the deterrence not only of attack by the deployed forces but also of the other and larger attacks of which the Pact is capable.

I am reasonably optimistic about our ability to deter even the largest of these attacks, provided that the Alliance continues with and expands its force improvement programs. As matters now stand, however, the probability of a successful forward defense by conventional means only is lower than I consider prudent. How the Soviet marshals would rate their own chances for a successful attack is uncertain.

While caution is appropriate about the numbers, we believe that the Warsaw Pact could, with a few weeks mobilization, deploy on the order of 80-90 divisions to the Center Region. The bulk of the reinforcements would have to come from the Soviet Union and would probably be drawn from the military districts in Western Russia. With additional time and risk, further reinforcements could be deployed from as far away as the Sino-Soviet border.

This latter threat would have a significant probability of breaking through NATO's forward defense. But the USSR, like NATO, must also be concerned about theaters other than the Center. Consequently, while we aspire to deal with even the high threat, we concentrate for current planning purposes on the "designated" threat of 80-90 divisions.

How rapidly the Pact could make this total force ready for attack is a matter of uncertainty. There is little doubt about the ability of the Soviets to call up and move large numbers of men into East Germany, Poland, and Czechoslovakia at a very rapid pace. Whether these forces would be fully combat ready with all of their logistics support in place is debatable. Nevertheless, we assume for planning purposes that the Pact could have its 80-90 divisions essentially on line and ready to attack in the Center Region within a relatively short period of mobilization.

The speed and power with which NATO could respond to the "designated" threat within the same timeframe is another factor surrounded by uncertainty. That we would acquire very prompt indications of so massive an undertaking is hardly in doubt. Essentially in question is how the Alliance would evaluate this information and how long it would take to decide on NATO's response. For planning purposes, we assume that NATO would start its mobilization somewhat later than the Warsaw Pact.

Whether these are reasonable assumptions can be argued. During the Berlin crisis of 1961, the United States actually mobilized two National Guard divisions, alerted two others, and moved about 40,000 men to Europe prior to any action by the Pact to mobilize additional forces. In 1968, however, NATO did not take overt action when the Soviets deployed forces into Eastern Europe for the invasion of Czechoslovakia.

If a reasonable amount of time is available for a NATO mobilization and deployment, a great deal can be done to defend against the "designated" threat. Exactly what forces would be required from the United States, and how rapidly, would depend on the size and speed of the Soviet reinforcement.

In terms of manpower, the U.S. contribution could be substantial and quick. Indeed, if manpower alone were the only test of effectiveness, the European Allies could match the "designated" threat with very little additional U.S. effort. However, numbers of organized units, levels of equipment, stocks of war consumables, and other variables are also important, and substantial numbers of U.S. ground and air forces would be needed.

In addition to the 4½ divisions and 22 tactical air squadrons already deployed, we stockpile the equipment for at least 2½ divisions in Europe. In CONUS itself we maintain 3½ heavy Army divisions in the active forces that we could commit to SACEUR. To these eight divisions (4½+3½), we could add at least four other active divisions and several Reserve component brigades. To complement the ground forces, we could also provide at least 38 active and reserve fighter-attack squadrons along with supporting reconnaissance and ECM aircraft.

With the war reserves that we propose to stockpile, we should be able to fight these forces longer than we believe that the Pact could sustain its attack.

To stress that we and our NATO allies have the ground and tactical air forces to mount a stalwart defense against the "designated" (or expected) Pact threat does not mean that we can view the situation in Europe with complacency. As I have indicated, NATO has somewhat fewer forces than the Pact, and if more pessimistic assumptions are made about several key variables (such as Pact mobilization and deployment time, warning and allied responses), the NATO position begins to look more precarious and the nuclear threshold becomes lower. It is also the case that while a rough balance of forces is essential to deterrence, it by no means guarantees an acceptable outcome for NATO if deterrence should fail. Even as we preserve the equilibrium, there remain a number of quantitative and qualitative weaknesses in our collective posture that must be removed.

b. The flanks of NATO

While the needs of the Center Region of NATO and our sea lines of communication provide the basis for most of our general purpose forces, it would be imprudent to assume that these would be the only theaters of conflict. The flanks of NATO—the Northern and Southern Regions—could easily come under attack separately or simultaneously in default of adequate deterrent forces.

The Soviets maintain ready divisions in the vicinity of Norway's lightly-defended northern frontier. In the South, the four Soviet divisions in Hungary, other units in the USSR itself and Hungarian, Bulgarian and Rumanian forces, constitute a potential threat to Italy, Greece and Turkey. As a consequence, both flanks may require additional support both on the ground and in the air.

c. Asia

Asian requirements have greatly affected our general purpose forces planning in the past decade. Beginning in 1969, with the advent of this Administration, significant reductions in the size of our forces in Asia have taken place. These reductions stem from major changes in our relations with Asian powers in the last few years, especially with the PRC; the withdrawal of United States forces from South Vietnam; and the growth in capabilities of our Asian Allies—capabilities which are now quite considerable. As a result of these changes, the requirement to maintain Asia-oriented forces is less demanding than in the past.

Nevertheless, we consider the possibility of conflict in Asia in deciding upon the characteristics and forward deployment of United States forces, because the continuing instabilities in Asia could involve the United States, and because having the visible capability to act can help to avoid, through deterrence, the necessity for action. A further large-scale or rapid reduction of United States forces in the Western Pacific would have unsettling effects in the region. Therefore, we continue to deploy one Army division to South Korea; a Marine Amphibious Force in Japan, including Okinawa, three tactical fighter wings at various bases in the Pacific, tactical fighter squadrons in Thailand, and B-52 aircraft on Guam and in Thailand; and naval deployments, including three carrier task forces, in the Western Pacific and, on occasion, in the Indian Ocean.

In Northeast Asia, South Korea's defense capabilities have been considerably improved in the last five years—to such an extent that, when the present modernization program is completed, we may have reasonable confidence in South Korea's ability to defend itself against an unaided attack by North Korea. At the moment, the principal role of our forces in Korea is to provide a hedge against the uncertainties and deficiencies in South Korea's defense posture, and to provide an inducement to caution on the part of North Korea against the precipitation of new hostilities.

As we look forward, we see the most useful role for United States forces in the Pacific as providing a strong measure of visible support for our Allies, a credible deterrent to those who might risk new hostilities, and a general umbrella under which our Allies can pursue negotiations and internal development in an environment that encourages cooperation and discourages hostilities. Therefore, our present plans call for maintaining our forward deployments in the Pacific.

We also intend to retain capabilities for Asian contingencies in our general purpose forces. For instance, we maintain both Army and Marine divisions in

the United States which are rapidly deployable and have a capability to operate in the Asian environment. Our tactical air forces retain a rapid deployment capability and are able to operate under austere conditions if necessary. We also retain a naval presence in the Pacific and must be able to defend the long supply line to the Far East.

We do look to the possibility of additional reductions in our air forces in Thailand and our B-52 force on Guam, when the situation in Southeast Asia permits.

We are also strongly recommending to the Congress a continuation of the essential military assistance programs needed by our Allies to strengthen their general purpose forces and improve their defensive capabilities in this difficult period until more lasting peace arrangements are achieved. The stronger our Allies, the greater is the incentive for North Vietnam and North Korea to seek negotiated solutions, thus enhancing the possibility for peace in this troubled part of the world.

d. Maritime missions

(1) Antisubmarine warfare

Although we would have to depend primarily on active forces and airlift for a quick NATO mobilization and the early stages of a war in Central Europe, there are obvious risks in placing such heavy reliance on only one form of mobility. Moreover, we should be able to start delivering very large tonnages by sea within a relatively short time after having established our sea lines of communication (SLOC). These tonnages could be of great value in a prolonged mobilization; they might contribute to the initial stages of a large-scale defense, and they would be essential to a more protracted conflict. For all these reasons we maintain some sealift, would charter more in an emergency, and would deploy substantial antisubmarine warfare (ASW) forces—principally in the form of attack submarines, patrol aircraft, carrier air, and escorts—for protection of the sea lanes.

The precise justification for the size and composition of our ASW forces is quite complex and I do not propose to discuss it in detail. It should be evident, however, that the main threat to our Atlantic (and Pacific) shipping comes from the large Soviet attack and cruise missile submarine force. Our most effective strategy against this threat is a defense in depth, based on a series of barriers—manned primarily by submarines and aircraft—between the enemy threat and allied shipping. In addition, we would want to provide close-in protection for our merchant marine (particularly in convoy) with surface escorts and carrier-based aircraft.

These functions permit calculations of kill probabilities for various types and numbers of ASW systems against the threat, and thus lead to the establishment of force requirements. Our current estimates are that with existing and planned U.S. and Allied ASW forces, we could eventually turn back the enemy submarine threat without an unacceptable loss to our merchant shipping or to our naval forces.

(2) Sea control

While I have placed primary emphasis on the submarine threat, I do not wish to underestimate the emergence of the Soviet surface fleet and land-based naval aircraft as factors of increasing weight in the maritime balance of power. We have estimated in the past that most of these ocean-going vessels, the long-range aircraft, and portions of the attack and cruise missile submarine forces were intended to counter our carrier task forces.

Now, however, Soviet objectives may be more ambitious. With the launching of one 40,000-ton carrier (comparable in size but not in mission to our Essex class) and the construction of another underway, with continuing efforts to establish overseas bases on the coasts of Africa, in the Indian Ocean, and in Cuba, and with a gradual growth in open-ocean operations, the Soviet leaders are clearly intent on making their naval presence felt on a worldwide basis. With the reopening of the Suez Canal, this objective will become more easily attainable.

These expanded forces and operations may be primarily designed to establish a political presence, but for the first time they put the Soviet Union in a position to challenge the United States and its allies for control of the seas. Certainly that has already been the effect of their naval deployments in the Mediterranean.

Whichever may be the correct interpretation, we are determined to maintain our own sea lines of communication on a worldwide basis and to ensure that the naval balance of power does not tilt against us. In the long run, we anticipate that, with homeporting, 12 carrier task forces—five in the Atlantic and Mediterranean, and seven in the eastern and western Pacific—are adequate to any challenge from the Soviet surface navy and long-range aircraft in regions of interest to the U.S. However, qualitative improvement in those task forces and in our other surface combatants, will be necessary in order to upgrade their defenses against antiship missiles and to improve the range and accuracy of our own attack ordnance. I shall discuss these improvements when I come to the specific programs for the Navy general purpose forces.

As part of the effort to ensure a naval balance, we plan to expand our facilities at Diego Garcia and maintain a more frequent presence in the Indian Ocean. We may also wish to consider the use of long-range land-based aircraft for patrol in that general area.

4. *Other Planning Factors.*

a. Strategic mobility

I do not propose here to review what constitutes the preferred choice among such options as deployed forces, prepositioned equipment, and various types of strategic mobility (airlift and sealift). As a result of previous decisions and because we support the strategy of forward defense, we are committed to a mix of deployed forces, prepositioned equipment, and heavy dependence on strategic airlift in the form of C-141's and C-5A's. An earlier deployment concept designed to deliver the required number of divisions within a relatively short time called for a larger number of C-5A's than we have procured, plus a fleet of Fast Deployment Logistic Ships that we have not acquired at all. As a consequence, while we have adequate forces to reinforce the Center Region, we do not have sufficient lift to get them all there as rapidly as we would like.

We may be designing to a scenario that is excessively demanding. If it were to take the Pact longer than we assume to deploy its 80-90 divisions, the timetable for our own deployments could be relaxed somewhat. Furthermore, if the European allies continue to improve their reserve forces, as the Federal Republic of Germany is doing with its Territorial Army, the pressure to deploy all the U.S. reinforcements by a very early date may decline. In either of these circumstances, a late arriving division may be more valuable to the defense of the Center Region than we currently assess it to be. I should add that even under the current scenario, forces deploying after D-day may still have an important role to play in strengthening NATO's defenses.

I do not consider it wise, however, to bank on all the uncertainties turning out in our favor. In any event, our strategic airlift demonstrated its worth during the recent war in the Middle East, and other occasions may arise when we will want to exploit its capability on an even larger scale. Accordingly, I believe that we should expand our airlift so as to enhance our NATO reinforcement capability. That, in turn, should give us ample capacity for Pacific contingencies and the "off-design" cases that I have mentioned earlier.

If we are to increase our strategic airlift to handle the requisite amount of tonnage for the NATO contingency, we should also improve the readiness of our ground forces to exploit it. It is not efficient to have a large and costly capacity for long-range mobility if equipment and men are not ready for loading as it becomes available. Nor will the lift have been fully utilized if units, having debarked from their aerial ports, cannot move to their combat positions in a timely fashion. Therefore, I shall also propose specific measures to accelerate the deployability of our forces.

b. National Guard and Reserve Forces

As should be evident, our contingency planning depends heavily on the National Guard and Reserve as well as on our active forces. This means that to be useful, they should have a high standard of readiness. Whether, in fact, they do, and whether they are worth their costs, is a recurrent question. It is perhaps most relevant to the Army ground forces.

During the past decade, the costs of the Army Reserve and National Guard forces have nearly tripled, and they now have received substantial quantities

of modern equipment. Yet despite repeated efforts to increase their readiness, even the highest-priority Army Reserve brigades do not become available for deployment as early as we would like. Except under very optimistic assumptions about the time required for Pact mobilization and deployment, the upshot is that the majority of Army Guard and Reserve units cannot play a role in the early and critical stages of a war in Central Europe.

I recognize, of course, that the Army Guard and Reserve have other important functions to perform in circumstances where mobilization and deployment proceed at a more leisurely pace, as was the case during the Berlin crisis of 1961. I also believe that we should take out some insurance against the possibility of a war in Europe continuing at high intensity for a protracted period even though our first priority must go to outlasting the Pact in the first phase of an assault. The National Guard and Reserve provide that insurance.

However, we must examine whether we are getting an adequate return from our investment in these forces in terms of their contribution to our more demanding contingency plans. My initial examination last fall led to my decision that some cuts should be taken in those units that are only marginally effective, with the savings that result to be applied to increasing the capability of other Reserve Component units. I have directed that a more comprehensive study of the Reserve and National Guard be made, and this study is now underway.

5. *Summary.*—It should be clear from the foregoing that we place considerable emphasis on NATO in our planning algorithm. However, because we are planning on a moderate basis to respond to the various NATO contingencies, we have the forces available for, and largely suitable to, other eventualities. At the same time, we are avoiding the extremes of an open-ended demand for general purpose forces and a completely arbitrary sizing and deployment of the forces related only to intuition (however well informed) about the current political climate. To follow the moderate course I have outlined does not, however, absolve us from continuing to test our baseline forces against "off-design" contingencies. Nor should it cause us to ignore well-established political trends that warrant changes in our basic force structure and deployments.

I realize that in laying out the basis on which we plan our general purpose forces, I may invite controversy. Challenges no doubt can be leveled at the assumptions we make about contingencies, scenarios, threats, warning times, allied contribution and the other factors that are so critical to the size, composition and deployment of our forces. But since controversy already exists about these forces, I would prefer to see the public informed to the fullest extent possible so that we can join with our critics to see where, specifically, our differences lie. Only then can we consider systematically the options and their implications.

My own view is that:

The general purpose forces will continue to grow in importance as nuclear parity continues.

We have a minimum of these forces considering the extent of our interests and responsibilities and the capabilities of potential opponents.

To reduce the force structure further would undermine the stability that comes from a basic equilibrium, and would lower the chances for a more enduring peace.

We are, however, reassessing the types of forces we have and, in particular, the size and contribution of the support structure, to see whether adjustments can produce a more effective overall force balance with greater combat capability.

Whether or not there is agreement with these judgments, I trust that there will be no doubt about the basis for them. I will now proceed to the specific programs we propose to support the general purpose forces.

B. LAND FORCES

In consonance with the foregoing policy considerations, we propose to maintain in FY 1975 a land forces structure of somewhat more than 25 Division Force Equivalents (DFEs)—21½ Army active and reserve component divisions and four Marine Corps active and reserve divisions. This force is 1/3 of a division larger than that planned for FY 1974, but it provides about 7% fewer DFEs than we had at the end of FY 1968, the Vietnam peak. The Army intends to strive for a greater than planned combat strength in its FY 1975 force structure by reducing headquarters and support elements.

The land forces structure is expressed here in terms of Division Force Equivalents because that concept provides a good standard of measure for land forces capabilities. In the Army (active and reserve) it encompasses the division itself plus two support increments (SIs), totaling about 48,000 men. A comparable Marine Corps force, totaling about 32,000 men, would include the division itself, supporting force troop units, and selected helicopter, helicopter support, and anti-air missile units which are organic to a Marine Aircraft Wing.

The DFE is a notional concept in the sense that it is an average used for the planning and management of the overall force structure, particularly in the Army. For example, an Army force structure of 21 DFEs would require more than one million men when deployed abroad for sustained combat. In peacetime, however, some of the support increments for the active forces, including those deployed abroad, are maintained in the reserve components, as shown below for end FY 1974.

	Divisions	Support increments
Active Army:		
Deployed in Europe.....	4 1/4	6 3/4
Deployed in Korea.....	1	1 1/4
Deployed in the United States.....	7 3/4	6
Total, Active.....	13	14
Army Reserve components.....	8	27 3/4
Total, Army.....	21	41 3/4

The support increments include not only such familiar service support units as medical, supply, maintenance, transportation, and construction, but also combat and combat support units such as separate brigades and battalions, armored cavalry regiments, artillery battalions, air defense battalions, surface-to-surface missile battalions, and aviation units.

Obviously, the composition of a particular force would be tailored to the requirements of the combat theater for which it is designed. An Army Corps designed for deployment in Western Europe, for example, would differ markedly from one designed for deployment in South Korea or Southeast Asia. These differences are taken into account in planning the total Army force structure.

While 48,000 may still be a good estimate of the number of personnel required to man and support a U.S. Army division in sustained combat abroad, I am by no means satisfied that the allocation between combat and support spaces is at the optimum. Nor am I satisfied that the number of service support units deployed abroad is at the proper level, considering our rapid reinforcing capabilities and the service support functions which our allies could provide both in peacetime and in wartime. As I indicated earlier, we are now actively reexamining these so-called "teeth to tail" issues, not only in the Army but also in the other services.

1. FORCE STRUCTURE CHANGES

In FY 1975, we will begin to see the effects of our efforts to reallocate Army resources from support and headquarters into combat forces; about nine maneuver battalions will be added to the active Army structure. The 25th Infantry Division, with only six active maneuver battalions, will continue to rely on one National Guard infantry brigade (two Bns), plus one separate Reserve infantry battalion for roundout. However, the Army has an independent brigade (197th) which is counted as part of the 13 1/4 division force and which could be used to roundout this division in a nonmobilization situation. The associated reserve component units will be closely supervised by the parent division staff and will take their summer training with that division.

In addition, four reserve component brigades (1 airborne and 3 infantry) are being converted to two mechanized and two armored brigades in FY 1974. These four new "heavy" brigades will be added to the five existing mechanized and one existing armored brigade (making a total of seven mechanized and three armored brigades) now earmarked for early deployment in a major contingency. Two more infantry brigades may be converted to mechanized brigades in FY 1975, depending upon the availability of equipment. We know from experience

that a reserve component brigade can be made ready for deployment much sooner than a reserve component division. Hence the emphasis is being placed on brigades, rather than on divisions, for the early deployment role.

Over and above these two ongoing efforts to make the total force concept a reality, we are now considering a plan to affiliate a substantial number of reserve component battalions with the active Army divisions and the early deployment reserve brigades. The brigades of an Army division are normally assigned three or four battalions but are organized to control as many as five battalions. By taking advantage of this broader control potential, we can significantly increase our early reinforcing capability, since in the event of a war the affiliated battalions could mobilize and deploy as part of the active Army divisions and early deployment reserve brigades.

This concept is a new departure for the United States Army. We will be watching with great interest the progress of this experiment in total force planning.

A comprehensive study is now underway to provide an in-depth analysis of all the factors involved in enhancing the contribution of the National Guard and the Reserve under the Total Force policy. Organization, manning, recruiting, retention, equipment, training requirements, operational readiness, mobilization deployment objectives, management systems and structures, programming, budgeting and funding procedures, and possible trade-offs between Active and Guard/Reserve forces will all be considered in this study.

Meanwhile, it would be inefficient to maintain units no longer needed, or units which cannot be adequately equipped or trained. Accordingly, we are now taking steps to make improvements in reserve component readiness, both in equipment and training. To provide resources for these improvements, I am proposing some reductions in the size of the Army reserve components, both in structure and in paid drill strength. The reductions in structure will come from units which are excess to our needs and from other management actions. We will provide the details on these structure changes as our planning progresses.

With respect to the combat support forces, the first Chaparral/Vulcan air defense batteries are scheduled to be introduced into the Army reserve component in FY 1975. Subsequently, the first Aerial Fire Support Units will enter the forces.

In the active Army forces, the deployment of the new Lance surface-to-surface missile will permit the last of the Sergeant and Honest John units to be phased out. A modified version of the AH-1G equipped with the Tow missile, the A11-1Q (Cobra-Tow), will also be introduced into the active Army.

No significant changes are planned in the Marine Corps force structure. However, beginning in FY 1975 one rifle company in each of 18 of the 27 active infantry battalions may be carried at zero strength. (In FY 1973-74 one company in each of nine battalions was carried at zero strength.) This arrangement, or some suitable alternative, is made necessary by the general squeeze on active duty personnel. The equipment for these companies could be placed in storage. In an emergency, given the additional personnel authorization, the Marine Corps could quickly man these 18 companies by drawing on trained personnel in other less essential assignments.

2. LAND FORCES MODERNIZATION

In contrast to the naval, air and mobility forces, the land forces are organized primarily around formations designed to accomplish specific functions rather than around equipment. Hence, the same kinds of equipment are used by several different types of organizations, including both Army and Marine Corps. Accordingly, this discussion will be focused on specific items of equipment without reference to the kind of units that will employ them.

As I noted at the beginning of this section of the Report, in addition to continued equipment modernization we now need to improve substantially the materiel readiness of our general purpose forces, including the replacement of assets provided to Israel or otherwise consumed in connection with the recent Middle East conflict. Shown on the following table are the major land forces equipment modernization and improvement programs proposed in the FY 1975 Budget, as compared with the amounts provided for those programs in FY 1973 and now planned for FY 1974. The FY 1974 figures include the FY 1974 Supplemental requests, shown in parentheses.

ACQUISITION COSTS OF MAJOR LAND FORCES MODERNIZATION AND IMPROVEMENT PROGRAMS¹

[In millions of dollars]

	Fiscal year—		
	1973 actual funding	1974 planned funding ²	1975 proposed funding
Close combat (tank/antitank):			
Continued modification and procurement of M60 series tanks (including Marine Corps).....	178	(47)227	250
Modification and procurement of M88 recovery vehicle (including Marine Corps).....		3	59
Procurement of armored personnel carrier (M113A1).....		(44)	69
Development of new main battle tank.....	22	54	9
Development of mechanized infantry combat vehicle (MHCV).....	8	12	33
Development and procurement of armored reconnaissance scout vehicle.....	12	10	278
Development and continued procurement of TOW and Dragon anti-tank missiles (including Marine Corps).....	97	(92)217	
Attack helicopters:			
Procurement of TOW modification for Cobra attack helicopter (AH-1).....		73	87
Procurement of Cobra-TOW attack helicopter (AH-1Q).....			28
Procurement of Sea Cobra attack helicopter.....	34	26	31
Development of advanced attack helicopter.....	20	49	61
Air defense:			
Acquisition and testing of foreign short range air defense system (SHORADS) missile and Chaparral modifications.....	4	3	61
Stinger missile system.....	20	25	34
AN/TSQ-73 air defense control and coordination system.....	5	13	7
Acquisition of improved Hawk surface-to-air missile systems (including Marine Corps).....	144	137	110
Continued development of SAM-D surface-to-air missile system.....	171	194	111
Fire support (surface-to-surface missiles):			
Development, modification, and procurement of Pershing missile system.....	56	64	31
Acquisition of Lance missile system.....	104	81	65
Combat support (air mobility helicopters):			
Continued development of utility tactical transport aircraft system (UTTAS).....	50	103	54
Continued development of heavy lift helicopter (HLH).....	38	60	58

¹ Includes costs of R.D.T. & E., procurement of the system and initial spares, and directly related military construction.² Figures in parentheses are the amounts included in the fiscal year 1974 supplemental.*a. Close combat (tank/anti-tank) program*

The recent Middle East conflict reaffirmed our earlier conclusion that modern anti-tank weapons fired from the air as well as the ground can provide an effective counter to the modern tank. The anti-tank weapon, however, is primarily a defensive weapon and cannot take the place of the more versatile tank, particularly in the offensive role. Hence, a proper balance of both types of weapons is required in any combat theater that lends itself to mobile armored operations.

Placed in the NATO-Warsaw Pact context, where our overall strategy is primarily defensive while the other side's strategy is primarily offensive, modern anti-tank weapons in sufficient numbers can help to offset the Warsaw Pact's superiority in numbers of tanks. Accordingly, we plan to continue our efforts to improve NATO's anti-tank capabilities while at the same time we continue to modernize our tank forces.

M60 series tanks

For the near term modernization of our tank forces we propose to continue the procurement of the M60A1 series tanks. Last year, it was planned to increase the rate of production of the M60A1 series tanks from 360 per year (for the Army only) to 480 and then to about 515 per year through FY 1976 to provide the Marine Corps 428 M60A1 tanks to replace their old M48s and M103s. Now, in view of the lessons learned from the recent Middle East war and to replace the tanks furnished to Israel, we have decided to increase M60 series tank production to about 665 per year over the next few years.

Furthermore, we believe the Army should replace more of the gasoline powered M48 tanks still assigned to its reserve components. Accordingly, we have included in the FY 1974 Supplement about \$47 million for an addition 133 M60A1

tanks, some of which will replace tanks sold to Israel. (In addition, the Army will buy 155 M60A1 tanks with the funds received from the sale of less costly, earlier model tanks to Israel.) Thus, a total of 768 M60A1 tanks would be funded in FY 1974—648 for the Army and 120 for the Marine Corps.

For FY 1975 we are requesting a total of \$250 million for M60 tanks, including \$234 million for the procurement of 664 tanks (510 Improved M60A1s for the Army and 154 M60A1s for the Marine Corps), \$8 million for RDT&E, and \$8 million to equip some existing M60A1s with add-on gun stabilization, top loading air cleaner, improved reliability engines, and improved electrical systems.

The last of the 428 Marine Corps M60s are scheduled for procurement in FY 1976, at which time the Army plans to buy the M60A3 which, in addition to the add-on stabilization and other improvements mentioned above, will have a laser rangefinder, solid state ballistic computer, tube-over-bar suspension, and commander/gunner passive nightsight. The M60A3s (and the M60A1s to be retrofitted to the M60A3 configuration) will replace the earlier M60s in the active Army, and the earlier M60s in turn will replace old M48s in the reserve components.

M88 recovery vehicle

The M88 recovery vehicle, which has been out of production since the early 1960s, is designed to retrieve disabled tanks of M60 size from the battlefield under combat conditions. The existing M88s are powered by gasoline engines. We now propose to buy a diesel-powered version of this vehicle and convert all the existing M88s in the inventory to diesel power. A total of nearly \$59 million is included in the FY 1975 Budget—\$50.3 million for procurement of 117 M88s (77 for the Army and 40 for the Marine Corps), and \$8.4 million for the conversion of the first increment of M88s to the M88A1 diesel engine configuration. A final buy of the M88A1 is planned for FY 1976, and retrofit kit procurement is planned through FY 1978.

Armored personnel carrier (M113A1)

We are also requesting about \$44 million in the FY 1974 Supplemental for the procurement of 923 M113A1s—some to replace vehicles provided to Israel and the bulk of them to replace the M114 three-man, command and reconnaissance vehicles used in the reconnaissance role. The M114 has proven to be very difficult to maintain and the Army needs a more dependable vehicle, such as the M113A1. The use of the M113A1 in place of the M114 in Europe is intended as an interim measure since the M114s now in use there are scheduled to be replaced eventually by the Armored Reconnaissance Scout Vehicle (ARSV) which is now in development. These additional M113A1s, when no longer needed in Europe, would be used to replace other M114s in the active Army.

New main battle tank

For the longer term modernization of the Army tank inventory, we are proceeding with the development of the new main battle tank, the XM-1. This program is the successor to the XM-803 (MBT-70) which was terminated by the Congress in 1971. The XM-1 development program was approved by the Deputy Secretary of Defense in January 1973, and in June 1973 contracts were placed with two firms to develop prototypes for competitive evaluation. The \$69 million request for the XM-1 in FY 1975 is to continue development.

The XM-1 will probably have the same main armament as the M60A3 (i.e., the 105mm gun), improved fire control, and a new type of armor which promises increased survivability against modern anti-tank weapons. The acquisition cost of the tank itself will be about twice as much as the M60A3, but on a ten year system cost basis (i.e., the cost of buying the tank plus ten years of operation) the cost would be only 20 percent higher. Even so, the question remains: Is the XM-1 likely to be worth 20 percent more than the M60A3? The answer is not yet clear; it depends largely on how much better the new type armor proves to be as compared with the M60A3 armor.

Our M60A1 is certainly as good, if not better than the Soviet T-62. We cannot prudently assume, however, that Soviet tank technology has come to a standstill; they may be working even now on a new, significantly improved medium tank. Furthermore, as the recent Middle East war again has demonstrated, our tanks must not only be able to defeat the opposing tanks, they must also be able to survive against the opposing tanks and anti-tank weapons. In this respect, the XM-1 should have a distinct advantage over our M60 series tanks.

Accordingly, I believe it would be wise to proceed with the XM-1 development program to provide both an option for the production of a new, more survivable main battle tank for the 1980s, as well as a hedge against a Soviet breakthrough in tank technology.

MICV

The \$9 million included in the FY 1975 Budget for the MICV program will continue development of this new lightly armored, tracked, infantry fighting vehicle and its primary armament, the Bushmaster system. First procurement for the operational inventory is scheduled in FY 1977. The initial procurement objective is 1,186 vehicles, enough to replace the M113A1 armored personnel carriers for the rifle squads of a portion of our Mechanized Infantry battalions and to provide for a training base. The MICV, which will carry a fully equipped squad of combat troops, is designed to operate as a companion vehicle with tanks as part of the combined arms team.

Armored reconnaissance scout vehicle (ARSV)

The \$33 million requested for the ARSV in FY 1975 includes \$8 million for continued development, and \$25 million for production tooling and the first 35 production vehicles for test. Three tracked prototype vehicles from one contractor and three wheeled prototype vehicles from a second contractor are now being subjected to competitive testing. No decision on the production test contract will be made until these tests have been satisfactorily completed.

The ARSV is a three-man lightly armored combat vehicle which is intended as the ultimate replacement for the M114 three-man command and reconnaissance vehicles with our cavalry units in Europe. As noted earlier, the M113A1 will serve as an interim replacement until the ARSVs are delivered. The initial procurement objective is 1,147, sufficient to equip most of our cavalry units and provide for a training base.

Tow and Dragon

As I indicated earlier, our assessment of the results of the Middle East conflict has led us to the conclusion that the production of Tow and Dragon anti-tank missiles should be substantially accelerated.

Production of the Tow missile is now running at 12,000 per year, all for Army. Procurement of the Tow missile for the Marine Corps was scheduled to begin in FY 1975. We now propose to increase FY 1974 procurement to 23,425 missiles—6,000 more for the Army and a first quantity of 5,425 for the Marine Corps. In addition, we plan to buy 985 more Tow launchers for the Army in FY 1974, making a total of 1,158. The first procurement of launchers for the Marine Corps was originally scheduled for FY 1975. We plan to buy the first 100 in FY 1974. A total of \$92 million is included in the FY 1974 Supplemental for these purposes.

In FY 1975, we propose to buy a total of 30,319 missiles and 1,041 launchers—24,000 missiles and 762 launchers for the Army, and 6,319 missiles and 279 launchers for the Marine Corps. These procurements are substantially higher than planned for FY 1975 last year. A total of \$149 million is included in the FY 1975 Budget for the Tow program—\$138 million for procurement and \$11 million to continue development of a night sight for Tow.

Under this accelerated program, the Army will achieve its Tow inventory objective by FY 1977 instead of FY 1978 as planned last year, and the Marine Corps, by FY 1976 instead of FY 1977.

Procurement of the Dragon anti-tank missile began in FY 1972 with the purchase of a limited production test quantity of 560 missiles and 28 trackers for the Army. Last year it was planned to buy 9,200 missiles and 900 trackers for the Army in FY 1975. We now propose to increase the FY 1975 procurement for the Army to 15,200 missiles and 1,200 trackers, and buy the first increment of 1,378 missiles and 158 trackers for the Marine Corps. A total of \$129 million is included in the FY 1975 Budget for the Dragon program.

Both the vehicle mounted Tow and the one-man portable Dragon anti-tank missile systems offer significant improvements in combat effectiveness as compared with the weapons they will replace. The Tow is replacing the jeep-mounted 106mm recoilless rifle, and the Dragon is replacing the two-man portable 90mm recoilless rifle. Army forces in Europe will receive first priority in the delivery of these weapons.

b. Attack helicopters

Our experience in Vietnam confirmed our judgment on the usefulness of Tow-armed attack helicopters in the anti-armor role, particularly with respect to Europe where the Warsaw Pact enjoys a substantial superiority over NATO in number of tanks. Accordingly, we intend to press forward with our Tow-armed helicopter programs during the coming fiscal year.

Cobra-Tow modification

Last year \$73 million was provided to modify the first 101 AH-1G Cobra helicopters (out of a prospective total of 298) to carry the TOW missile. Eight R&D prototype Cobra-Tow helicopters (designated the AH-1Q) had been previously funded.

We still plan to complete the modification of the remaining 189 AH-1Gs to the Cobra-Tow configuration in FY 1975. Evaluation of the performance of the prototype vehicles, however, indicates that engine upgrading and a change in the transmission will be needed if the AH-1Q is to carry a full load of eight TOW missiles in addition to the normal armament and fuel load of the AH-1G. The AH-1Q as presently configured can carry 2 to 6 TOWs (depending on the weather and altitude) in addition to its other armament and fuel load.

Accordingly, we now propose to increase the power of the current AH-1 engine and substitute the gear boxes and transmission used in the Marine Corps AH-1J for those now used in the AH-1G. We are requesting a total of \$87 million in the FY 1975 Budget for the modification of the 189 AH-1Gs to this upgraded configuration. A final decision on the procurement of these modifications, however, will not be made until the test and evaluation of the improved AH-1Q has been satisfactorily completed.

Cobra-Tow procurement

In addition to modifying a total of 298 AH-1Gs to the upgraded configurations, we also propose to buy about 300 new improved configuration AH-1s during the FY 1975-79 period. The Army needs a total of about 1335 attack helicopters to equip the current force structure (active and reserve). The current inventory is now about 260 below that figure, and the shortfall is expected to increase even further due to peacetime attrition and the phasing out of approximately 300 UH-1M utility helicopters now used as substitute attack helicopters.

The only new attack helicopter in development, the AAH, is expected to cost more than twice as much as the upgraded AH-1Q. Consequently, we would buy only enough AAHs to meet the most demanding requirement. The procurement of some 300 upgraded AH-1s in the FY 1975-79 period would not only avoid the potential shortage but also maintain a "warm" production base. A total of \$28 million is included in the FY 1975 Budget for the procurement of the initial increment of 21 upgraded AH-1Qs.

Sea Cobra attack helicopter

The Marine Corps in recent years has been buying a twin engine version of the AH-1 for over-water operations. Forty-nine of these AH-1Js were procured in FY 1969 and prior years, 20 in FY 1973, and 20 more were funded in FY 1974. Another 35 are needed to complete the equipping of three active squadrons and two training elements (a total of 84 UE aircraft).

We believe that some of the AH-1Js should be configured to carry TOW, and all should be configured to carry the newly developed protective devices (e.g., infrared suppressors, detectors, jammers, and decoys), in addition to their current payload. In order to do so, however, the payload capability of the aircraft clearly needs to be improved substantially. The AH-1J (Improved) will cost about a half a million dollars more per aircraft than the current AH-1J (\$1.5 million vs. \$1.0 million). But we believe that the enhanced capabilities of the AH-1J (Improved) will fully justify the additional cost.

Accordingly, we now propose to buy 15 of the improved AH-1Js in FY 1974, instead of the 20 current model AH-1Js previously planned. The \$31 million included in the FY 1975 Budget for this program would provide \$27 million for another 20 AH-1J (Improved) Attack Helicopters, plus about \$4 million for advanced procurement for the final 20 to be procured in FY 1976.

Advanced attack helicopter (AAH)

The FY 1975 Budget also includes \$61 million to continue development of the AAH for the longer term modernization of our attack helicopter force. As you

know, the AAH is the successor to the Cheyenne attack helicopter program that was terminated by the Army in August 1972. The Army, OSD, and the Special Subcommittee on Close Air Support of the Senate Armed Services Committee (in its Report issued in June 1972) have all concluded that there is a need for both fixed wing and attack helicopter close air support on the modern battlefield. The AAH would help to fulfill the attack helicopter portion of this mission in the 1980s and beyond.

The AAH program is being pursued on a design-to-cost basis in the hope that we can develop a suitable attack helicopter that is less costly and less complex than the Cheyenne. Development contracts have been awarded to two contractors. Each will fabricate two flying prototypes to be evaluated in a competitive fly-off in March 1976. If all goes well, the first production AAHs, for test and then inventory, would be procured in FY 1978-79.

c. Air Defense

Air defense of the army in the field has come under a great deal of scrutiny as a result of the recent Middle East conflict. One conclusion upon which there is general agreement in the Defense Department is that major improvements in our theater army air defense capabilities are urgently needed.

Air defense of an army in the field is usually provided by a mix of aircraft, SAMs, and AAA weapon systems supported by radars, command and control systems, electronic warfare equipment, and passive (camouflage, dispersion, etc.) defense measures. The air defense objective is to limit the opponent's effectiveness in attacking our critical assets and to counter the air attack in such a way as to permit our field army forces to maneuver as required.

The evolving Soviet field army air defense doctrine features highly mobile SAMs and AAA which are designed to provide protection for fast moving tank and mechanized infantry forces. In the recent Middle East conflict, however, Soviet field air defense equipment, particularly in the case of Egypt, was also employed in a heavy barrier defense involving three SAM systems (SA-2), SA-3 and SA-6) each operating in a different but overlapping altitude and range regime. This mode of deployment was probably peculiar to that situation; it would not be consistent with a highly mobile Soviet offensive in Europe.

Compared with the Soviet Union, the low-to-medium altitude air defenses (other than aircraft) of the U.S. Army in the field are considerably less mobile. The principal mobile elements of the Soviet system are the SA-4 and SA-6 SAMs, and the twin 57mm and ZSU-23-4 guns. The comparable U.S. elements are the Hawk and Vulcan/Chaparral. The SA-6, for example, moves in two tracked vehicles—the missile launcher vehicle and the radar van—and can fire with little preparation. The Hawk, in contrast, moves in several wheeled vehicles and requires considerably more time to set up and fire, but it is quite effective in the medium altitude regime. The Soviet ZSU-23-4 is track-vehicle mounted and radar directed. The U.S. counterparts, the Vulcan gun and Chaparral short range missile, are also mounted on tracked vehicles but they are not radar directed and therefore lack an all-weather capability.

Thus, our most immediate need for air defense of the Army in the field is an effective all-weather, highly mobile, low altitude system. We also need an improved follow-on to the Redeye man-portable SAM. For the longer term modernization of ground forces air defense, we are continuing the development of the SAM-D as a potential replacement in the 1980s for the Nike Hercules as well as for the Improved Hawk.

Development of short range air defense systems (SHORADS)

Several of our allied have developed Shorad systems which may be able to meet our need for an all-weather capability. By drawing on these developments, we can conserve our R&D funds for other essential development programs which we, in turn, can share with our allies.

Accordingly, we have conducted preliminary firing tests of three foreign short range air defense missile systems—the French Crotale, the German Roland II, and the U.K. Rapier. We plan this summer to select one of the three systems for further intensive tests to determine whether it can be modified, and at what cost, to meet our particular requirements.

Inasmuch as it will take some time to test and produce the selected foreign system, and in view of the fact that the need for improvement in this area is urgent, we also propose to continue, as a hedge, the improvement program for

the Chaparral. The current improvements being tested would significantly enhance the effectiveness of the Chaparral missile, but not to the level of effectiveness promised by the foreign systems.

The \$61 million included in the FY 1975 Budget for the Shorads program would provide \$35 million to acquire from the U.S. licensee (there is a U.S. licensee for each of the three foreign missiles) a limited test quantity (about five sets of equipment and 100 missiles) of the selected Shorad system, and \$26 million to modify the first 1500 Chaparral missiles. If we decide to acquire the foreign Shorad for the operational inventory, it will be produced in the U.S. by a U.S. licensee, and the excess Chaparral assets will be turned over to the Reserve Components.

Stinger

The Stinger is an advanced man-portable air defense system being developed to replace the Army and Marine Corps Redeye, which will need replacement in the late 1970s. Stinger will be faster than Redeye, and will utilize a more effective guidance system.

The \$34 million requested in the FY 1975 Budget would provide for continued development. The first production quantity is scheduled for procurement in FY 1976 for the Army. Procurement for the Marine Corps is scheduled in FY 1977.

AN/TSQ-73 Air defense command and control system

The current AN/MSG-4 ground force Air Defense Command and Control system was deployed in 1958; it is extremely costly to operate and maintain, does not integrate easily into other services' C² systems, and can be easily jammed. Accordingly, we plan to replace that system with the new AN/TSQ-73. The \$7 million included in the FY 1975 Budget for the AN/TSQ-73 is needed principally for the continued testing and engineering changes on the five units procured with FY 1974 funds. Procurement of additional units has been deferred pending the satisfactory completion of the tests and the successful accomplishment of the necessary engineering changes.

Improved Hawk

A total of about \$110 million is included in the FY 1975 Budget for the Improved Hawk program—\$89 million for the Army and about \$21 million for the Marine Corps. The Army amount includes \$81 million for the procurement of the last 9 battery conversion kits, 520 missiles and the last increment of 38 Improved Platoon Command Posts (IPCPs), and \$8 million for the development of further modification to improve the performance of the Hawk system. The Marine Corps amount (\$21 million) provides \$17 million for the procurement of 230 missiles, about \$2 million for three IPCPs, and about \$2 million for the installation and check-out of six battery sets.

The Improved Hawk conversion program is on schedule; the first Basic Hawk battalion was converted to Improved Hawk in November 1972 in USAREUR/Seventh Army. The Army will complete procurement of this system in FY 1977 with a total of 90 battery sets and the Marine Corps in FY 1976 with a total of 14 battery sets.

SAM-D

The SAM-D, which is intended as a potential replacement for the Nike Hercules and Improved Hawk, is a very complex surface-to-air guided missile system. The performance specifications call for a high single shot kill probability in a sophisticated electronic countermeasure environment, and an ability to conduct multiple simultaneous engagements against the type of high performance targets that potentially could be employed against U.S. forces in the field in the 1980s and beyond.

After an intensive review of the status of this program last year, we have decided to reexamine SAM-D in order to provide emphasis on austerity, and to ensure adequate testing of the guidance system and the phased array radar before we proceed with Engineering Development. Past experience with such complex systems has conclusively demonstrated that it is faster and cheaper in the long run to ensure the proper performance of the key components before proceeding with full scale development. A total of \$111 million is included in the FY 1975 Budget to continue the SAM-D development program.

d. Fire support (surface-to-surface missiles)

The two current acquisition programs in this area are the Pershing and the Lance.

Pershing

The \$31 million requested in the FY 1975 Budget would provide \$20 million for the Pershing I and \$11 million to demonstrate technology for a major upgrading of the system.

The Pershing I amount includes \$11 million for the last increment (88 missiles) of a four-year missile modification program designed to extend system life, \$1 million for spare parts and \$8 million for the procurement of 58 automatic azimuth reference systems.

The current Pershing IA Missile System is a good example of "modernization by modification". Since the system was first fielded in 1962, it has been repeatedly modified through modular product improvements which have provided increased weapon system reliability and maintainability, better mobility, survivability, and flexibility in nuclear fire support for SACEUR's General Strike Plan. Recent additions to the system include the automatic azimuth reference system which enables the Pershing to be fired from unsurveyed firing positions, and a sequential launch adapter which provides a reduction in firing response time in the Quick Reaction Role in support of the NATO mission.

Nevertheless, we now believe that we should start to examine the technical feasibility of a major upgrading of the Pershing system that would incorporate the latest available technology. The \$11 million would support that effort.

Lance

A total of \$65 million is included in the FY 1975 Budget for the Lance surface-to-surface missile system. Of that amount, \$30 million is for the procurement of another 194 missiles (less warhead sections) for the U.S. Army. The balance of \$35 million is needed for the procurement of warhead sections (excluding the nuclear device which is provided by the AEC) both for the U.S. Army and for the support of Lance systems sold or expected to be sold to our NATO allies.

The Congress has stipulated that a study of the cost-effectiveness of the non-nuclear warhead for Lance be submitted prior to the request of funds for the procurement of such warheads or missiles to carry them. The Defense Department, of course, will comply with that request if our analyses indicate this option is worth pursuing.

e. Combat support (air mobility-helicopter)

The United States in recent years has led the rest of the world in the use of helicopters to enhance the mobility of the land forces. Although the Soviet Union is now placing considerably more emphasis on this aspect of land forces mobility, we are still well ahead in this area, except for heavy lift helicopters. And, of course, we must also develop a successor to the Army UH-1 tactical transport helicopters, most of which were acquired during the Vietnam war build-up.

Utility tactical transport aircraft system (UTTAS)

The Uttas is the intended successor to the UH-1 in the tactical transport role. The development program, for which \$54 million is requested in FY 1975, is proceeding well. The engine development contract was awarded in March 1972, and contracts for the development of prototype aircraft were awarded to two competing contractors in August 1972. The selection of a single contractor for final development and production is scheduled for November 1976, after a prototype fly-off and evaluation of the two competing designs has been completed.

The Uttas would provide the Army in the 1980s with a utility transport helicopter that emphasizes reliability, maintainability, and survivability in sustained combat or field operations. In contrast to the UH-1, the Uttas would be able to carry a full combat equipped Army squad. Also, it would be more effective than the UH-1 in the resupply and medical evacuation roles.

Heavy lift helicopter (HLH)

The current Army helicopter designed for the heavy lift mission is the CH-54. The lift capacity of this helicopter is about ten tons, not enough to lift many types of land forces equipment which are subject to damage in battle. Accordingly, the Defense Department is now developing the technology for a new helicopter, the HLH, that could lift about 22½ tons. We envision that this helicopter would be used to satisfy the heavy vertical lift requirements of all the services in both a combat support role, such as air-mobile operations or recovery of damaged vehicles, and in a combat service support role to move supplies and unload ships.

To continue development of the HLH, we are requesting \$58 million for FY 1975. This amount will continue design and fabrication of the first prototype with rollout scheduled for May 1975. In addition, fabrication of a second prototype will be initiated. Extended reliability endurance testing will be accomplished on major dynamic components, the flight control system and engines. A full prototype flight test program will be undertaken in FY 1976 and a decision will then be made as to the future course of the HLH program.

3. EQUIPMENT OF THE RESERVE COMPONENTS

Emphasis on the modernization of equipment in reserve components continued during the past year in consonance with the Total Force Policy. Significant improvement in the levels and quality of equipment on hand in Guard and Reserve units has been achieved. Issues of major items of equipment to the Army Guard/Reserve and the Marine Corps Reserve during FY 1973 totaled \$714 million, of which Army received approximately \$682 million and the Marine Corps \$32 million. As of the end of FY 1973, on hand combat-capable equipment in the hands of troops for the Army National Guard and Reserve totaled approximately \$3.66 billion (about half of the mobilization requirement), and in the Marine Corps, about \$155 million (almost all of the mobilization requirement).

It is interesting to note that from the end of FY 1969 through the end of FY 1974 a total of almost \$3.3 billion of equipment will have been delivered to the Army reserve components compared with a total of less than \$.7 billion of equipment retired. Nevertheless, some important Army reserve component equipment deficiencies remain to be corrected. These are mainly in the newer items of equipment—Tow/Dragon anti-tank missiles, M60 series tanks, Chaparral air defense missiles and modern communication equipment. Action is being taken to alleviate these deficiencies as fast as the needs of the active Army permit.

With the exception of long leadtime production items, which are funded but not yet delivered, the equipment required for the Marine Corps Reserve Division is either in the hands of existing units or in Prepositioned War Reserve Stocks.

Associated with the equipment program is the requirement to provide adequate storage and maintenance facilities, as well as field training areas, to complement the influx of equipment. To meet this requirement, the Department of Defense in 1970 undertook a facilities improvement program designed to provide adequate facilities for all Army Guard and Reserve units by the end of 1980. A total of \$242.7 million has thus far been provided for this program, and another \$102.7 million is requested for FY 1975.

C. NAVAL FORCES

As I indicated earlier, one of the major objectives of the General Purpose Forces Program is to ensure, together with our allies, the maintenance of an appropriate naval balance with the Soviet Union, taking into account the differences in the objectives of the two forces. In planning our naval forces during the past few years, we have had to take into account two internal considerations.

The first was the need, given the prevailing fiscal constraints and the block aging of many World War II-constructed ships, to reduce force levels over the near term in order to provide the funds needed for modernization over the long term. The number of commissioned general purpose ships in the fleet (including the Naval Reserve Force) has, in fact, been reduced from 951 at the end of FY

1968 to 588 at end FY 1973, and is programmed at 522 for the end of FY 1975. Beginning in FY 1977, the trend will be markedly reversed as the number of new ships delivered to the fleet exceeds the number being retired.

The second consideration—the need to pursue assiduously the so-called “high-low mix” approach to weapon system acquisition—has already been discussed. This concept is particularly applicable to the ship construction program, and the Navy has made a valiant effort to apply it, particularly to the surface escort and major aircraft platform categories.

1. AIRCRAFT PLATFORMS

The planned program for sea-based aircraft platforms is an excellent example of the high-low concept in practice. As you know, we are now building three NIMITZ-class nuclear-powered aircraft carriers, the last of which is expected to cost almost one billion dollars. These will be very large multi-purpose aircraft carriers capable of operating the Navy's most sophisticated fighter/attack and ASW aircraft under the most demanding conditions in high threat areas. This extensive capability, however, is not needed in low threat situations, such as escorting merchant ships or Naval underway replenishment groups in ocean areas outside the range of Soviet land-based aircraft. For this latter purpose, a relatively small and austere aircraft platform capable of launching V/STOL aircraft and helicopters for air defense and ASW protection would be sufficient. The Sea Control Ship, which is expected to cost less than \$120 million in escalated, “then-year” dollars (excluding the lead ship and all outfitting and post delivery costs), is intended to fulfill this low cost/limited performance aircraft platform requirement.

a. Aircraft carriers

The United States, since the Korean War, has kept five or more carriers continuously deployed—two in the Mediterranean and at least three in the Pacific. The wisdom of maintaining forward deployed carrier forces on a continuous basis has again been impressed upon us by recent events in the Middle East.

Normally, with all carriers homeported in the U.S., a total of 15 active carriers would be required to support five forward in peacetime. Indeed, the attack carrier force level has varied between 14 and 17 ships since 1960, with an average of 15.

Two years ago, in the face of increasing fiscal and manpower pressure, it was decided that the attack carrier force would have to be reduced. In order to support the five carrier forward deployment with fewer total carriers, it was also decided to locate the dependents of the crews of two carriers overseas—one in the Pacific, and one in the Mediterranean. With this arrangement, the five carrier forward deployment could be adequately supported on a continuous basis with a total of 12 carriers. For contingency operations of relatively short duration, the 12 carrier force could support more than five forward; and in wartime, of course, all available ships would be deployed forward. Accordingly, it was planned last year to reduce the carrier force from 15 at end FY 1974, to 13 at end FY 1975, and eventually to 12.

Now, however, in view of the difficulties encountered in completing the homeporting arrangements for a carrier in Greece and the need to retain a capability to deploy a carrier periodically in the Indian Ocean, we have decided to hold the carrier force at 15 through FY 1975, reducing to 12 in later years. The first of the three *Nimitz*-class carriers (the *Nimitz*) is now expected to be delivered to the fleet in FY 1975, and the second (the *Eisenhower*) is contracted for delivery 21 months later (which now would be late FY 1976 or early FY 1977). The last *Nimitz*-class carrier, the *Carl Vinson*, is expected to be delivered in FY 1981.

While no further changes in the estimated costs of the three *Nimitz*-class carriers have been reported to my office in the past year, delays in the delivery of the *Nimitz* and the *Eisenhower* could increase their costs. The delays being encountered with the *Nimitz* and the *Eisenhower* are not expected to affect the delivery schedule for the *Vinson* which, as shown on the table beginning on the next page, was fully funded in FY 1974.

ACQUISITION COSTS OF MAJOR NAVAL FORCES MODERNIZATION AND IMPROVEMENT PROGRAMS¹

(In millions of dollars)

	Fiscal year—		
	1973 actual funding	1974 planned funding ²	1975 proposed funding
Aircraft platforms:			
Procurement of CVN-70 aircraft carrier.....	299	657	143
Design and procurement of the sea control ship.....	13	29	
ASW Aircraft:			
Development and procurement of S-3A carrier-based ASW aircraft.....	618	548	562
Modification of SH-3 helicopter.....	9	17	24
Development of the HSX.....			2
Continued procurement of the P-3C land-based ASW aircraft.....	132	(50)202	152
Other surface combatants:			
Procurement of DD-963 destroyers.....	249	612	464
Procurement of DLGN nuclear-powered frigates.....		81	256
Acquisition of patrol frigate.....	204	6	437
Continued development of Aegis ship air defense system.....	79	40	67
Acquisition of the light airborne multipurpose system (LAMPS).....	51	32	34
Development and test of surface effect ship.....	32	61	58
Acquisition of patrol hydrofoil missile ship.....	30	23	108
Antiship missiles:			
Acquisition of the harpoon antiship missile.....	60	81	136
Development of encapsulated harpoon.....	12	12	13
Acquisition of active Standard antiship missile.....	20	8	35
Acquisition of Condor antiship missile.....	28	33	30
Attack submarines:			
Procurement of SSN-668-class nuclear attack submarines.....	1,048	921	548
Continued development and procurement of MK-48 torpedo.....	176	193	160
Acquisition of the AN/BQQ-5 sonar system.....	30	57	72
Undersea surveillance systems:			
Undersea surveillance systems: Development and development of Socus and improved Socus and development of Tass.....	127	144	137
Underway replenishment and support ships: Procurement of underway replenishment and support ships.....	189		209

¹ Includes costs of R.D.T. & E., procurement of the system and initial spares, and directly related military construction.

² Figures in parentheses are the amounts included in the fiscal year 1974 supplemental.

When the *Vinson* is delivered, the *Midway* will be retired and we will then have a 12-ship force comprised entirely of large post-World War II carriers, including four nuclear powered. By 1985, however, the first of the *Forrestal*-class carriers will be 30 years old and we must be prepared to replace them some time in the 1980s if a force of 12 ships is to be maintained. Accordingly, we have tentatively programmed the first of a new class of lower-cost carriers, designated the CVX. The characteristics of the CVX have not yet been defined, but conceptual studies and preliminary design work are underway. We expect this effort to be oriented toward ship dimensions, propulsion system and other features that would be compatible with a design-to-cost goal of about \$550 million in FY 1973 dollars. The study and preliminary design phase should result in completion of a Development Concept Paper (DCP) in 1974 that will better define the characteristics of the proposed new carrier and the alternatives available.

The program to convert attack aircraft carriers (CVA) to the multipurpose or CV configuration is being continued. The CV operates fighter, attack and ASW aircraft and combines the role of the CVA and the ASW carrier (CVS). Experience to date has shown that the problems associated with operating all three types of aircraft on the large deck (*Enterprise/Forrestal* class) carriers can be overcome. Three *Forrestal*-class carriers are now being operated as CVs, and three more are planned to be converted to that configuration in FY 1975. The *Enterprise* and *Nimitz* will be converted to the CVN configuration in FY 1976, and *Eisenhower* will be delivered as a CVN. The last two *Forrestal*-class ships will be converted by FY 1977. After that we expect to operate 11 CV/CVNs and one CVA until the *Vinson* is delivered and the *Midway* is retired.

b. Sea Control Ship

The Sea Control Ship (SCS), as I noted earlier, is expected to be the key element on the "low" side of the spectrum of seabased air capability. Its primary mission is to provide seabased aircraft (V/STOL and helicopter) for protection

of underway replenishment groups (URGs), amphibious groups, and convoys when operating in low air threat areas where protection by the much more capable and costly CVs is not available. In fulfilling this primary mission, the SCS with its embarked aircraft and accompanying escorts will provide surveillance against surface and submarine threats, localization and attack of identified submarine threats, and attack of surface and limited air threats beyond surface combatant range.

The SCS will be a relatively low-cost, austere vessel of about 14,000 tons, with a planned complement of 14 helicopters and three V/STOL aircraft, plus maintenance facilities for two Lamps helicopters (which would be deployed aboard accompanying surface combatants).

Last July the Navy completed a lengthy test of the SCS concept in a coordinated fleet environment using a helicopter assault ship, the USS *Guam*, as the test platform and AV-8A *Harriers* and SH-3H helicopters as the initial test aircraft. These tests have verified the basic concept, but some deficiencies were identified, particularly with respect to the ability of the planned helicopter complement to sustain the continuous ASW and surveillance operations needed to fulfill the mission. The Navy plans to correct these deficiencies and conduct additional tests with a full complement of SH-3H helicopters and AV-8As, modified as required to ensure their suitability for the SCS role.

I am well aware of the uneasiness expressed in the Congress with regard to the SCS program. I am convinced, however, that the high-low concept offers the only feasible solution to the problem of maintaining the required total combat capability within current budgetary constraints. We must have quantity as well as quality if we are to maintain an appropriate naval balance with the Soviet Union.

The SCS with the SH-3H and the AV-8A would provide a useful capability at a relatively low cost, thus facilitating its acquisition in quantity. Moreover, like all air-capable ships, the SCS would be equipped, over its lifetime, with several generations of aircraft. Development of a new, more capable ASW aircraft, the HSX, is now under consideration, and eventually a new, improved V/STOL fighter will become available. These new aircraft would further improve the combat capabilities of the SCS.

In view of the fiscal constraints which are likely to prevail in the foreseeable future, we are proposing a program of eight SCSs. The lead ship would be funded in FY 1975, the next three in the following year, and two each in FY 1977 and 1978. We hope to hold the average cost of the follow-on ships to \$117 million in escalated "then-year" dollars (excluding outfitting and post-delivery costs) through such techniques as rigid design to cost, competition between shipbuilders, and an independent design validation by a second shipbuilder. (The lead ship would cost \$172 million.) Under this schedule, delivery of the ships to the fleet would be spread over the FY 1978-1981 period.

The FY 1975 Budget includes \$143 million, which together with \$29.3 million provided in FY 1974, will finance the construction of the first SCS (the lead ship). As directed by the Congress, none of these funds will be obligated, pending approval by both the House and Senate Appropriations Committees.

2. ASW AIRCRAFT

The Navy plans to operate its CVs and CVNs with two squadrons of fighters, three or four squadrons of attack aircraft, and one squadron each of ASW fixed-wing aircraft and ASW helicopters per carrier. This aircraft mix can be varied within limits, depending upon the specific mission of the carrier, e.g., primary attack or primary ASW.

S-3

We plan to acquire one squadron (10 aircraft) of the new S-3s for each of the 12 carriers expected to be in the fleet in the late 1970s. If intensive ASW operations are required, two squadrons (20 aircraft) per carrier could be provided by drawing on the S-3 complements of other carriers—e.g., those undergoing overhaul or those which are least likely to encounter large submarine threats.

Procurement of 93 aircraft has already been funded, including 45 in FY 1974. A DSARC review of the S-3 program in October 1973 indicated that testing up to that point had been successful. Accordingly, execution of the contract option on

the FY 1974 quantity of 45 aircraft was approved under the Continuing Resolution Authority. A total of about \$562 million is provided in the FY 1975 Budget for the continued acquisition of the S-3, including \$504 million (in addition to the \$54 million provided for advance procurement in FY 1974) for the procurement of another 45 aircraft and \$56 million of advance procurement funds for the remaining 41 aircraft to be procured in FY 1976.

The first few S-3s are expected to become operational this year. Five squadrons are expected to be available in FY 1975 and the full 12 squadrons by the end of FY 1977.

SH-3

The ASW helicopter force currently consists of nine squadrons (8 UE aircraft per squadron) of SH-3s. Eight squadrons are allocated for CV use and one squadron for testing aboard the "interim" SCS (i.e., the GUAM). Procurement of the SH-3 is tentatively scheduled to be resumed in the FY 1976-79 period to provide additional helicopters for the multi-purpose carriers and for the SCSs.

In addition, a program is now underway to modernize the current force of SH-3 A/D/G helicopters to the new SH-3H configuration (the one we plan to buy in the FY 1976-79 period) which will have significantly improved ASW and surveillance capabilities. The first two squadrons of SH-3s are being converted to the H model in FY 1974-75. Another \$24.4 million is included in the FY 1975 Budget for the modification of an additional 14 SH-3s.

H5X

As noted earlier, the H5X is being developed as an eventual replacement for the SH-3H, as well as the Marine Corps' CH-46 medium assault helicopter, sometime in the 1980s. The H5X would have better ASW sensors and avionics than the SH-3, and greater endurance and payload. Thus, it would provide an improved ASW capability against the quieter and more capable Soviet submarines expected in the 1980s. Some \$2 million is included in the FY 1975 Budget to initiate development of the H5X.

The Navy carrier-based ASW forces also include six S-2 and four SH-3 squadrons in the Naval Reserve. These units would be used to replace attrition in the active force. The S-2s will have this role only until FY 1978, when the active force will complete the transition to S-3s. The S-2s, however, could also be operated from forward land bases during a contingency, thus increasing our capability to conduct ocean surveillance and to provide protection to convoys.

P-3

In addition to the carrier-base ASW aircraft forces, the Navy also has a total of 36 squadrons of land-based ASW aircraft—24 active and 12 reserve. The active force is now equipped with the A, B, and C models of the P-3, but the older P-3As are being replaced, one squadron per year, by the new P-3Cs. The P-3C has a more capable, computerized avionics system which permits it to operate more effectively with the more advanced ASW sensors, including the new DIFAR directional sonobuoy system. The P-3As released from the active force are being transferred to reserve units to replace the obsolete SP-2 ASW aircraft.

Replacement of the P-3As in the active force is scheduled to be completed in FY 1979, at which point we would have 15 squadrons of P-3Cs and 9 squadrons of P-3Bs. Procurement of P-3Cs to replace the P-3Bs would be initiated with FY 1979 funds and the first P-3B squadron would be replaced in FY 1980. The FY 1975 Budget includes \$139 million (in addition to the \$9 million provided in FY 1974) to procure another 12 P-3Cs, plus \$12 million of advance procurement funds for the planned FY 1976 buy, and \$1 million for construction of a P-3 Tactical Support Center (TSC) Training Building.

The upgrading of the reserve force with P-3As and Bs released by active units will also continue through the decade. All 12 of the Naval Reserve units will be equipped with P-3As by the end of FY 1981.

3. OTHER SURFACE COMBATANT SHIPS

In addition to aircraft platforms, the Navy's surface combatant force includes cruisers, frigates, destroyers, and ocean escort ships. These other surface combatants have many potential missions, but the size of the force and the configuration of individual ships are determined primarily by the need to provide perimeter defense for high-value naval forces and, in conjunction with our allies,

for military resupply shipping during a major conflict with the USSR. Surface combatant screens constitute the final defensive barrier protecting high-value surface ships, while tactical and patrol aircraft and attack submarines provide the outer defense against enemy air and submarine threats.

Notwithstanding the substantial improvement in the Soviet surface navy during the past decade, the Soviet submarine force is still the principal threat to our naval forces and military resupply shipping. This is so because the submarine force is the only element of the Soviet Navy that can operate, in wartime, at long distances from bases for sustained periods without air cover. Accordingly, ASW screening needs must take precedence over AAW needs in determining the size and character of our surface combatant force.

Recent analyses tend to confirm our conclusion that surface combatant screens could contribute significantly to attrition of both the air and submarine threats to escorted units. These ships would be particularly important for close-in defense against the quieter Soviet torpedo attack submarines. Moreover, surface combatant screens can make a major contribution in AAW protection by attrition of incoming cruise missiles, which are a potent and steadily growing threat to our ships at sea.

The U.S. requirement for other surface combatants is related to the size and character of the Soviet threat, the number of forces and groups requiring protection, the level of defense desired for each protected force or group, and the contributions of surface combatants that can be expected from our allies. In addition, an allowance must be made for ships in overhaul at any one time.

The U.S. forces to be protected by surface combatants in a conventional war in Europe, the most demanding force planning contingency, include the 12 carriers, the amphibious shipping for 1½ Marine division-wing teams, about ten Underway Replenishment Groups (URGs), and five merchant ship convoys.

Based on discussions with our NATO allies, we conclude that a substantial number of ships capable of open-ocean escort duty would be made available for use in the Atlantic sea lanes in the event of a war with the USSR during the late 1970s and early 1980s. We would also expect significant help from allies in the Pacific. There is some doubt, however, that allied ships would be on hand where required for convoy duty early in a conflict. Consequently, we plan to provide enough U.S. surface combatants to protect the military convoys which would be sailed during the first month of a major war. As the allied ships become available, the U.S. combatants initially used for convoy duty would be made available as replacements for losses which would inevitably be suffered in the early stages of a major war against the USSR. In view of the many uncertainties involved in calculations of this sort, as well as the need to maintain a balanced modernization program, the Defense Department has established an interim goal of 250 escorts, including a large number with at least an austere area AAW capability.

At the end of the current fiscal year we will have a total of 198 such surface combatants, including 37 Naval Reserve ships in commission and two ships in conversion. In FY 1975 the downward trend will be reversed as one more DLGN and the first three DD-963s are delivered to the fleet. By the end of that fiscal year we will have 202 ships, including 72 dual-purpose (i.e., AAW-ASW) and 130 ASW-only. Of the latter, 37 will be Naval Reserve ships in commission. This force would be supplemented in wartime by 12 modern Coast Guard cutters which carry ASW weapons and sensors.

Some 137 of the 202 Navy escorts expected to be in the force at the end of FY 1975 will still be serviceable in the mid-1980s. By that time, three more DLGNs already funded, as well as 27 more DD-963s of the 30 now planned, will have been delivered to the fleet, giving us 167 serviceable ships. Adding the currently planned 50 Patrol Frigates (PF) and the proposed two additional DLGNs, will bring the total to 219, of which 115 would have at least an austere area AAW capability (the PF will have one surface-to-air missile launcher). If we include the Coast Guard Cutters, which have an ASW capability equivalent to that planned for the PFs, the total becomes 231.

The proposed program would still leave us somewhat short of the overall force goal. To remedy this apparent short-fall and to maintain an orderly replacement program, the Navy has proposed two new ship construction programs. The nearer term program would be a new class of area air defense destroyer, now designated the DGX, which would replace the older DDG and DLG type ships as they reach retirement age beginning in the early 1980s. The longer term program involves the development of a new type, high-speed "surface effect" de-

troyer, now designated the DSX. This latter effort has not yet progressed beyond the stage of experimenting with small scale (100 ton) test craft, and the mission and configuration of the ship are still undefined. Both ships are far enough in the future that no attempt has been made to fix the size of the programs, and there is ample time for further review of surface combatant requirements before it will be necessary to do so.

DD-963

With regard to the DD-963 destroyers, the FY 1975 Budget includes \$464 million which, together with the \$198 million provided in FY 1974 for advance procurement, would complete the funding for the last seven ships at the initial target price established in the contract with Litton Industries. That contract, in addition to the customary provision for the escalation of wage rates and materials costs, also provides for a resetting of the target price on the basis of actual cost experience, but not to exceed the ceiling price. On October 29, 1973, the contractor submitted such a repricing proposal. Negotiations are expected to take about four months, and a firm agreement on the increase in cost should be reached by the Spring of 1974.

On the basis of the data available at the time the FY 1975 Budget was prepared, it appeared that the cost increase on the 30 ships could amount to about \$260 million—about \$200 million for an increase in the target price, plus about \$60 million in additional escalation charges resulting from the increase in the target price. The \$200 million increase in target price, however, is still short of the \$351 million difference between the initial total target price (\$1,789 million) and the total ceiling price (\$2,140 million). Moreover, the contractor's repricing proposal is higher than our estimate. Hence, we cannot now preclude the possibility that the firm agreement on the adjustment of the target price may exceed this \$200 million increase.

Escalation of wage rates and material costs must be added to both the target price and the ceiling price. Escalation computed on the basis of the initial target price is estimated at about \$397 million; this, together with the \$60 million of additional escalation resulting from the increase in the target price, would bring the total escalation cost to \$457 million. Adding that amount to our estimate of the revised target price, i.e., \$1,989 million, would bring the total cost of the Litton contract up to \$2,446 million. Including the costs of other DD-963 related contracts (GFE, etc.) the total cost of the 30-ship program would be more than \$3 billion.

Since an agreed figure on the Litton contract cost increase was not available at the time the FY 1975 Budget was prepared, and since the additional funds will not be required for obligation in FY 1975 in any event, we propose to finance any cost increase in the FY 1976 Budget.

Given the labor shortage at the Litton shipyard in Pascagoula, we cannot rule out the possibility that progress on the DD-963 program will be affected by the delays encountered with the LHA program, which was to have preceded it in construction. Work on the two programs is now proceeding simultaneously and the first LHA, as well as the first three DD-963's are now expected to be delivered during FY 1975. The DD-963 lead ship was launched on November 10, 1973, and all 30 destroyers are now expected to be delivered by the end of FY 1978. In FY 1979, the last of the World War II destroyers are expected to be phased out of the active force.

DLGN

We now have five nuclear-powered frigates (DLGNs) under construction. Delivery of these ships, together with the cruiser and two frigates now in the fleet, will give us a total of eight nuclear-powered surface combatants—enough for two nuclear-powered attack carrier task forces when none are in overhaul. Two DLGN-36 class ships funded in FY 1967 and FY 1968 are nearing completion: the first, CALIFORNIA, is now scheduled to be delivered to the fleet in FY 1974, and the second, SOUTH CAROLINA, in FY 1975. Delivery of the first three DLGN-38 class ships, which were funded in FY 1970-1972, will be delayed about seven months each because of a shortage of skilled labor in the shipyard. Based on the revised schedule, DLGN-38 is expected to be delivered in FY 1976, and DLGN-39 and 40 in FY 1977.

Last year the Congress added to our FY 1974 budget request \$79 million for advance procurement of long leadtime items for two more DLGNs (DLGN-41 and 42). Notwithstanding the high cost of this class of ships, we have decided

to go ahead with one in FY 1975 and protect the option to go ahead with the second in FY 1976. Accordingly, we have included in the FY 1975 Budget a total of \$256 million—\$152 million to complete the funding of the first of these two ships (DLGN-41) for which \$116 million (\$46 million in FY 1970-71 and \$70 million in FY 1974) has already been provided, \$92 million in additional advance procurement funds for the second of these two ships (DLGN-42) for which \$19 million (\$10 million in FY 1970 and \$9 million in FY 1974) has already been provided, and \$12 million for escalation and post-delivery costs on the five DLGNs already under construction. Another \$167 million would be required in FY 1976 to complete the funding of DLGN-42. Thus, the total funding would amount to at least \$268 million for DLGN-41 and \$278 million for DLGN-42.

Clearly, we will not be able to afford many surface combatant ships at these prices. Yet, as I noted earlier, we must in this decade phase out all of the remaining World War II surface combatants from the active forces. If we are to procure the large numbers of ships that will be needed to maintain a force of even 200-225 other surface combatants, it is evident that the bulk of them must come from the "low" side of the spectrum. It is for this reason that we want to press forward with the Patrol Frigate program.

PF

The PF will be much smaller and less costly to procure and operate than the DLGN-38 and DD-963 class ships currently under construction, but it will be designed to provide protection against both air and surface, as well as submarine attack. With a displacement of 3,500 tons, the ship will have a launcher and fire control system for surface-to-air and anti-ship (i.e., STANDARD and HARPON) missiles, a 76 mm gun, ASW torpedoes and accommodations for two LAMPS helicopters. The "design-to-cost" approach is being applied vigorously to the PF program, and the average unit procurement cost to completion and outfitting and post-delivery costs, is now estimated at about \$70 million (i.e., in then-year dollars). The production contract for the lead ship, funded in FY 1973, was recently awarded, and construction is scheduled to begin in late 1974. The FY 1975 Budget includes \$437 million to finance the currently estimated cost of the first seven follow-on ships (excluding outfitting and post-delivery costs). Another 11 ships are scheduled for procurement in FY 1976, and the remaining 31 ships would be funded in the FY 1977-1979 period under the current plan. The PF lead ship would be delivered to the fleet by the end of FY 1977 and the follow-on ships during the 1978-1983 period.

While the PF program as currently planned will provide significant numbers of austere but capable ships for the modernization of the surface combatant fleet, we must also be prepared to replace the current DLG/DDG ships which will begin reaching retirement age in the early 1980s. The DGX, mentioned earlier, is being planned for this role. This ship would be equipped with the new AEGIS fleet air defense system which has a high power, long range phased array radar with a greatly improved target tracking and designating capability, and which uses the modified STANDARD missile. The Navy believes that engineering development of the AEGIS system will be sufficiently advanced by FY 1977 to warrant funding of the first DGX in that year. The preliminary design goal calls for a ship with a displacement of about 6,000 tons and an average cost per follow-on ship of about \$125 million in FY 1973 dollars.

Aegis

The Aegis system, which has been in engineering development for four years, is now being oriented toward the new DGX. But because of its modular design, the system will be adaptable to other classes of ships as well. DGX is currently planned to have a one launcher system, but a two launcher version is still an option for ships of DLGN size. Another \$67 million has been included in the FY 1975 Budget to continue development of the Aegis system.

Lamps

Another important system that is being acquired to improve the capabilities of our surface combatants is the Light Airborne Multi-Purpose System (Lamps). This system involves a helicopter operating from a destroyer-type ship, together with the associated support, communication and acoustic data processing equipment aboard the ship. Its role is to provide surveillance and detection of hostile submarines and surface ships, localization and attack of detected submarines,

and targeting information on surface ships. Lamps could be used on all surface combatants which are equipped for helicopter operations.

Lamps is being acquired in two phases. The MK I, which involves installation of shipboard equipment and conversion of H-2 helicopters already in the inventory to an SH-2 configuration, became operational in FY 1972, and the bulk of the modifications have been funded. The MK III, the second phase, includes the development of improved avionics and shipboard systems to be used with a modified version of a current or new airframe. Three H-2 helicopters are being modified to test components and the integration of the new airborne and shipboard systems. After the airframe has been selected, now scheduled for late 1975, contracts will be let for the eight prototype LAMPS MK III helicopters and the related avionics and sensors for test and evaluation. A production decision on Lamp MK III will not be needed until the late 1970s.

The FY 1975 Budget contains \$34 million for LAMPS--\$14 million for the MK I modification program, \$18 million to continue the MK III development effort, and \$2.5 million for a LAMPS helicopter maintenance hangar.

SES

For the modernization of the surface combatant force in the more distant future, the Navy is pursuing the development of the Surface Effect Ship (SES). The SES, as you know, is a variation of the air cushion vehicle and will use rigid sidewalls integral to the hull structure to contain the air cushion. If the required technology can be successfully developed, it would make possible the construction of ocean-going ships with speeds of 80 knots or more.

The development effort to date has concentrated on testing of the two 100-ton test craft completed in 1972, the preliminary design of a 2000-ton prototype ocean-going ship, and the development of the key subsystems for the larger ship. The preliminary design studies, recently completed by several competing contractors, have examined the technical feasibility and cost of a 2000-ton SES and provided technical proposals for the development of such a ship.

The SES development program is admittedly a high risk venture from the technological point of view, but it could also have a high payoff in terms of combat effectiveness. The central problem is to develop an ocean-going version of the SES with sufficient range, payload capacity and sea-keeping capability to warrant its cost. The key technical areas which must be mastered are the air cushion seals, the waterjet inlets, and ride control systems, i.e., the subsystems unique to this type of craft.

Accordingly, the principal emphasis in the FY 1975 program will be on the further development of the technology required for the principal subsystems, including additional testing of the 100-ton craft. When these steps are completed, we will again review the status of the program and decide on whether to undertake full scale development of the propulsors, transmissions, lift fans and seals, and complete the detailed design of the 2000-ton prototype. Pending that decision, which would be reflected in the FY 1976 Budget, we are requesting \$58 million for the SES development program in FY 1975.

PHM

In addition to the major surface combatants, which I have just discussed, the Navy also operates a small number of "minor" combatants, i.e., patrol ships of less than 300 tons. These ships normally operate against surface combatant ships as well as other surface craft in the conduct of surveillance, screening and special missions in coastal areas, island waters, and inland or narrow seas. The force now consists of 14 Patrol Gunboats, all of which were built since 1965. In FY 1975 this force will be augmented by the first two of a new class of Patrol Hydrofoil Missile ships (PHM).

The PHM is a cooperative NATO development program in which the U.S. is sharing its hydrofoil technology with other NATO nations. A Memorandum of Understanding signed by Italy, the Federal Republic of Germany and the United States in November 1972 provides for a cooperative development and production effort.

Two U.S. lead ships are currently under construction, and we tentatively plan to build 28 more of these ships for our use. The FRG has indicated its intention to have its ten ships built in the U.S. Italy expects to have at least one ship built here, and may build additional ships in its own yards. A production agreement among the three participating governments is expected to be signed later this year.

The first version, the semi-active Standard missile (SM-1-MR) is now installed in six DEG and two Patrol Gunboats (PG) not previously missile-equipped. The second version, the Standard anti-radiation missile (ARM) is planned for installation on 12 DDGs and four PGs (two PGs already have this system installed). The third version, Active Standard with a radar seeker, is still in development. This version of the Standard missile will have a range capability beyond the ship radar horizon.

The range of the Standard semi-active missile is limited to the range of the ship's radar, since the missile's target must be illuminated by a ship radar. The Standard Arm and Active Standard, equipped with an anti-radiation homing capability and an active terminal seeker, respectively, eliminate the need for illumination of the target by a ship radar and thus permit engagement of targets beyond the ship radar horizon.

Unfortunately, Active Standard has encountered development delays and can no longer be regarded as an interim program. It is now concurrent with Harpoon, and under current schedules, could be introduced to the fleet only a few months before Harpoon. Development of the Harpoon, however, is not sufficiently advanced to warrant cancellation of the Active Standard at this time. Accordingly, we are continuing development of the Active Standard missile, but only as a backup to Harpoon. Both programs will be carefully reviewed later this year, following completion of development testing of both systems, to assess the need for the continuation of Active Standard as a backup to Harpoon.

Meanwhile, FY 1974 funds will be utilized to initiate an 18-missile Active Standard test program—eight for development test and evaluation and ten for operational test and evaluation. If the DT&E firings are successful, and if Harpoon experiences development delays, then we would proceed with the ten operational tests and authorize long leadtime procurement for the Active Standard missiles needed to equip and support 12 DDG/DEG ships. This number of ships would give the Navy a reasonable interim capability pending availability of Harpoon.

Since procurement of the Active Standard missiles could be started in FY 1975 if OT&E is successful, we have included \$35 million in the FY 1975 Budget for this program—\$1 million to continue development and \$34 million for the procurement of the 74 missiles needed to equip the 12 ships. Thus, if Harpoon development does slip, we will be in a position to start procurement of Active Standard without further delay.

Condor

The Navy is also developing a long-range, electro-optical air-to-surface missile, Condor, for use by attack aircraft against both land and sea targets. This stand off missile could significantly improve the capability of our aircraft carrier forces to bring opposing surface ships under attack.

Development of the basic missile is essentially complete, and pilot line production missiles are being procured with FY 1973-74 funds for operational test and evaluation of Condor. Engineering development and flight testing of the dual mode radar and electro-optical seeker version of Condor will be conducted in FY 1975-76. This version would have a night/all weather capability. To reduce unit cost, a non-secure data link is also under development. Operational test and evaluation of the dual mode Condor is now scheduled to be completed in FY 1976. The FY 1975 Budget includes about \$30 million for this program—\$10 million for continued development and \$20 million for the procurement of 35 pilot line missiles, the minimum number needed to keep the line going pending a decision on full scale production, now expected in early 1975.

4. ATTACK SUBMARINES

Attack submarines are potentially the most effective element of our varied ASW forces. Nuclear-powered attack submarines (SSNs), because they are uniquely able to operate covertly; can be used to establish effective ASW barriers in waters which are otherwise under the control of enemy surface and air forces, and in which it would be untenable for other types of U.S. ASW forces to operate. SSNs could also be used in open ocean search for opposing submarines, and some would be needed in the Mediterranean.

In addition to the foregoing missions, the Navy is also investigating the use of SSNs for escorting high-value surface ships such as carriers in open ocean areas,

These hydrofoil ships will be capable of both hullborne and foilborne propulsion, and the U.S. version will be equipped with the U.S. Harpoon anti-ship missile, an Italian designed rapid-fire gun, and a Dutch designed fire control system. The ships produced for the FRG and Italy are expected to be equipped with an anti-ship missile of a European design.

Out of a total of \$108 million in the FY 1975 Budget for this program, some \$16 million in RDT&E funds is for the completion of construction and initial operational test and evaluation of the two leadships and for the preparation of a development data package for use in competitive bidding for the construction of the follow-on ships. The remaining \$92 million is for construction of the first four follow-on ships for U.S. use. But before these follow-on ships are placed on contract, the results of the initial operational test and evaluation of the two leadships, now scheduled to be completed in early 1975, will be carefully reviewed together with analyses of mission requirements to ensure that the ship is ready for quantity production and to verify the quantity required.

Harpoon

One of the most urgent needs of our surface combatant force is an ability to cope effectively with the large and still growing Soviet anti-ship missile threat, particularly when operating beyond the range of our land-based airpower and unaccompanied by sea-based airpower. Under these conditions, Soviet surface ships armed with SSMs can greatly outrange our gun-equipped surface combatants. In response to this need, the Defense Department has undertaken several anti-ship missile development programs, including aircraft and submarine launched, as well as surface launched systems.

The principal Navy anti-ship missile program is the Harpoon. This missile is designed to be launched from all of our surface combatants (except the Patrol Gunboats), the S-3 and P-3 ASW aircraft, the Navy's A-6 and A-7 attack aircraft and, in a special encapsulated version, from all but the oldest SSNs. The status of the program was reviewed by the DSARC in May 1973, and the conclusion reached was that developmental progress had been excellent and that initiation of engineering development was fully warranted. Accordingly, the weapon system development contract was awarded in June 1973, and the program is proceeding satisfactorily. Test firings have verified the missile design concepts, and test vehicles have been launched successfully from a P-3 aircraft and from the ASROC launcher of a Destroyer Escort.

The next phase of the Harpoon program involves the fabrication and testing of actual prototype missiles. The June 1973 contract provides for 40 prototype missiles as well as command and launch systems for P-3 and S-3 aircraft and a variety of surface combatants. These equipments will be used for the development test and evaluation phase to be conducted by the contractor with the assistance of Navy personnel, beginning in early 1974.

The progress in this testing and evaluation effort will be reviewed in the summer of 1974, and if the results up to that point are satisfactory, we will initiate production of pilot line missiles. Accordingly, we have included in the FY 1975 Budget a total of \$136 million—\$58 million to continue the Harpoon development effort, and \$78 million for the procurement of 150 pilot line missiles (58 for operational test and evaluation and 92 for the first operational deployment of Harpoon).

Encapsulated Harpoon

The encapsulated Harpoon is a Harpoon missile fitted with a launch capsule that would make it compatible with existing torpedo tubes. It would give our first line SSNs a longer range weapon, to complement their torpedoes, for use against surface ships. Prototype capsules are being developed and will be given structural and hydrodynamic tests during FY 1974. The Navy plans to complete system test and evaluation and to initiate pilot line production during FY 1975. The FY 1975 Budget includes about \$13 million to continue this program—\$10 million for development and \$3 million for procurement of the first 20 capsules. (The missiles themselves are included in the 58 Harpoons being procured for OT&E.)

Standard SSM

The Standard SSM program was initiated in 1971 to provide an interim anti-ship missile capability until the Harpoon could be developed and deployed. The Standard SSM is operational in two versions with a third now in development.

a role now being fulfilled primarily by surface ships. There are, however, several tactical employment problems to be resolved; for example, the difficulties involved in coordinating a "friendly" submarine with other types of ASW forces in wartime.

Given the prevailing fiscal constraints, we believe that a force of about 90 SSNs should be sufficient, together with other ASW forces, to support the essential requirements as we see them now. At the end of FY 1974 we will have 61 SSNs in the fleet and 27 funded but not yet delivered—for a total of 88. Of the 23 688-class nuclear powered SSNs funded through FY 1974, none will have been delivered to the fleet by the end of that fiscal year. Indeed, all 11 SSNs funded in FY 1973-74 were placed on contract within the last six months and the last one is scheduled for delivery in FY 1981. Thus, the shipbuilders involved have a very large backlog ahead of them. The submarine building program proposed for FY 1975 and subsequent years takes this backlog into account and is designed to maintain at least the 90 SSN force level over the next several years.

SSN-688

Our current plan is to procure three 688 class SSNs in FY 1975 and five every two years thereafter for the remainder of the 1970s. That will not only support a force level of 90 SSNs but also permit the early retirement of some of the older SSNs. Looking to the longer term future, I believe we should examine the feasibility and desirability of building a new class of SSNs that would be smaller and less costly than the 688 class which is now costing us almost \$200 million each.

The 688-class leadship, LOS ANGELES, was originally scheduled for commissioning in August of this year. This ship will be delayed about six months due to late delivery of contractor-furnished equipment and a slower-than-planned buildup of the workforce at Newport News, which is also building a variety of surface ships. Thus, the first SSN-688 class ship is expected to be delivered in FY 1975, with an additional 22 to be delivered by the end of FY 1981. The \$548 million included in the FY 1975 Budget would provide \$503 million, which together with \$78 million provided in FY 1974 for advance procurement, would complete the funding of the three submarines proposed for procurement in FY 1975, plus \$45 million for escalation, outfitting and post-delivery costs on prior year programs.

MK-48 Torpedo

The effectiveness of our attack submarines is being significantly improved with the acquisition of the MK-48 Torpedo. This wire-guided, acoustic homing torpedo was designed primarily for use against submarines, but it also has a good capability against surface ships. Operational evaluation of the MK-48 was completed in 1972, and the system was finally approved for fleet use in October 1972.

Procurement of the MK-48 in quantity began in 1972, and some 500 torpedoes were funded in both FY 1973 and FY 1974. The FY 1975 Budget includes \$155 million for the procurement of another 450 torpedoes, plus about \$5 million for RDT&E. When these 450 torpedoes are delivered, a large part of the current Navy procurement objective will have been fulfilled.

AN/BQQ-5 Sonar

While the MK-48 torpedo will be the primary weapon of the attack submarine force, the new digital, multibeamed sonar system, with both hull mounted and towed acoustic arrays, will be the principal sensor. This system, designated the AN/BQQ-5, underwent extensive developmental testing during 1972 and 1973, and was approved for production last year. It is being installed in all of the new 688-class SSNs, and it will be backfitted into all PERMIT and STURGEON-class SSNs during regular overhauls commencing in FY 1976. The FY 1975 Budget includes a total of about \$72 million for this program—\$16 million for development and \$56 million to procure eight systems for the backfit program, plus one training unit. When the AN/BQQ-5 enters service in FY 1975 not only will current Soviet submarines be detectable at significantly greater ranges than currently possible, but also the advanced beam forming and display features of this equipment will allow our SSNs to substantially increase their search rates.

5. *Undersea Surveillance Systems.*—The primary U.S. undersea surveillance system is now the fixed Sound Surveillance System (SOSUS), but mobile and deployable Towed Array Surveillance Systems (TASS) are also under develop-

ment. In addition, the Navy is examining the potential usefulness in the future of different types of systems, such as the Moored Surveillance System (MSS), which would employ buoys, and the Suspended Array Surveillance System, (SASS), which would use large, fixed, buoyantly suspended hydrophone arrays.

Towed arrays have also shown considerable potential as tactical sensors. In the tactical escort role the towed array would be used by surface combatants in much the same manner as current active sensors. The ships would have a processing capability on board to evaluate contacts, and LAMPS or other ASW aircraft would be used to prosecute the attack. Navy analyses and at-sea tests have shown that towed arrays should make a significant contribution to the ASW effectiveness of surface combatants.

The Navy plans to award a contract and start design and fabrication of an engineering development model of the surveillance TASS in FY 1975 and subject this model to at-sea test and evaluation in FY 1976. Work would also be started in FY 1975 on an advanced development model of the Escort TASS.

A total of \$137 million has been included in the FY 1975 Budget for the SOSUS and the TASS programs—\$116 million for SOSUS improvements and \$21 million for the development and test of the two versions of TASS.

6. *Amphibious Lift and Mine Countermeasure Forces.*—The current amphibious lift force objective is to provide a sufficient number of modern 20 knot ships to transport simultaneously the assault elements of 1½ Marine Amphibious Forces (MAFs), i.e., 1½ Marine division/wing teams together with their unit equipment (excluding fixed-wing aircraft which are transported on attack carriers or flown to the theater) and initial stocks of supplies. This force would enable us to conduct a division-size amphibious assault in a major combat theater (e.g., on the northern or southern flank of NATO), while at the same time retaining limited amphibious assault capability to cope with a minor contingency elsewhere.

The present amphibious force of 65 ships has sufficient capacity to lift just over one MAF, but is short of helicopter platform ships. We are now able to maintain three battalion landing team amphibious forces (corresponding to about 1/9 of a MAF) deployed forward continuously, one without helicopters because of the shortage of helicopter decks. A fourth unit, usually without helicopters, is deployed on an intermittent basis in the Caribbean.

With the five large general purpose Amphibious Assault Ships (LHAs) now under construction are delivered to the fleet, the remaining older, less efficient, ships will be retired, the helicopter platform shortage will be eliminated, and the overall lift capacity will be increased to 1½ MAFs (including ships in overhaul). At that time (late FY 1977) the amphibious lift would consist of 66 ships, all with speeds of about 20 knots. With this force, we will be able to maintain four battalion-size amphibious forces, all with major helicopter ships deployed forward continuously. However, even with the LHAs, it would be necessary to transfer ships from the Pacific to the Atlantic to be able to mount a division-size amphibious assault in the NATO area.

LHA

As you know, the LHA program has experienced numerous delays and contractual disputes. The first LHA was finally launched in December 1973 and is expected to be delivered to the fleet in March 1975, a delay of about two years from the original contract delivery schedule. Two more ships are scheduled to be delivered in each of the next two fiscal years, the last about 33 months beyond the originally scheduled date.

The current dispute concerns the contractor's (Litton Industries) request for an equitable adjustment of \$271 million in the contract price, which was submitted in March 1972. The Navy found this request to be unsubstantiated, and on 28 February 1973 the Navy Contracting Office issued a unilateral decision setting the new target price at ceiling. Litton thereupon filed an appeal with the Armed Services Board of Contract Appeals, and the Navy subsequently filed its response. Hearings before the Board are yet to be scheduled.

On the basis of the Contracting Officer's decision, the total cost to the Government of the five LHAs will amount to about \$1,145 million. Of that amount, the Congress has provided about \$1,127 million, leaving about \$18 million in outfitting, post-delivery and escalation charges to be funded as the ships are delivered.

The active mine countermeasure forces have undergone substantial reductions in recent years and further reductions are planned in the FY 1974-75 period as additional ships are transferred to the reserve forces. In part, this reduction has been offset by the greater use of mine countermeasures helicopters, of which there are now 21 specially equipped RH-53Ds in the force. These 21 helicopters, alone, could support a MAF-size amphibious assault against a medium mine threat, assuming several days' time to clear the area.

7. *Underway Replenishment and Fleet Support Ships.*—The Navy operates a total of about 120 underway replenishment (UNREP) ships, large tenders, and other fleet support ships such as salvage ships, tugs, and submarine rescue vessels. These ships provide wartime underway logistics support and mobile, forward area maintenance and repair facilities for deployed naval forces. In peacetime, support ships deploy to the Mediterranean and Western Pacific to support the Sixth and Seventh Fleets. Additional support ships can be deployed from the United States to sustain increased combatant ship activity in these or other areas during a crisis or in wartime.

Support ship force levels reflect requirements for both wartime and peacetime support of naval forces. The wartime requirements for UNREP ships are derived from estimates of the number of naval forces to be supported simultaneously, their expected location and distance from logistic bases, consumption rates for ordnance, fuel, stores, and repair parts, and the projected duration of the conflict. Peacetime requirements are derived from calculations of what is needed to support a smaller number of deployed ships operating in more widely dispersed areas.

Planned UNREP ship forces will provide a wartime capability to support deployed carrier and amphibious task groups in up to about four or five locations simultaneously. Denial of foreign bases, however, would reduce the number of simultaneous fleet operating areas which could be supported with our programmed UNREP forces. For example, a requirement to conduct sustained wartime operations, including carrier operations and a division-size amphibious assault, without foreign bases in an area such as the Eastern Mediterranean would force a drawdown in combatant ship deployments elsewhere because of the increase in UNREP ship cycling distances involved.

Forward deployments of UNREP ships in peacetime generally include about 16 to 18 ships. With the continuing decrease in the size of the UNREP force, however, it is becoming increasingly difficult to sustain this deployment without undue personnel hardships. Accordingly, the Navy plans to homeport a few support units overseas and operate others through the Military Sealift Command (MSC). MSC-operated ships are manned almost wholly by U.S. civil service crews. The ships remain abroad, even for overhauls, and the crews are rotated annually by air. Consequently, MSC-operated ships can achieve greater time on station and, hence, higher utilization rates in peacetime than active Navy-operated ships. Five Fleet Oilers and one Store Ship would be operated by MSC in FY 1975, and three more Oilers in FY 1976, for a total of nine UNREP ships under MSC control.

Tender force level goals are derived from planned wartime roles based on estimates of the number and location of ships to be deployed, the estimated volume of repair work needed, and the availability of overseas bases. Current forces can provide sustained maintenance and limited battle damage repair capability for most deployed surface ship forces in wartime, assuming concurrent availability of U.S.-operated ship repair facilities in either Japan or the Philippines. Peacetime forward deployment of tenders is generally limited to two ships in each ocean, which can easily be maintained within planned force levels.

Force levels for minor fleet support ships are derived from estimates of the likelihood of major damage to combatants requiring salvage or towing in a forward area, routine towing and other tug duties, and other service support requirements. Planned forces can support early deployment of several tug-type vessels for salvage support in a contingency. In peacetime, forward deployments are limited largely to a few submarine rescue vessels, ocean tugs and salvage ships, which can be accommodated within the planned force. As in the case of the UNREP force, the Navy plans to operate more of the minor fleet support ships in the MSC. A total of 13 ships will be MSC-operated by the end of FY 1976, and five more will be added from new construction by the end of FY 1979.

Because of their lower priority, the large scale modernization of the support ship forces has been repeatedly deferred and now lags far behind modernization of the combatant ship forces. Consequently, there will still be more than 50 World War II-constructed support ships in the active fleet at the end of FY 1977, the year in which the last of the ships now under construction or funded is delivered to the fleet. Clearly, a major effort to modernize the support ship force can no longer be deferred.

AE, AFS, AO, AD AND ATF

Accordingly, we propose to undertake in the FY 1975-1979 period a substantial ship building program in this area. A total of 32 ships would be built, at a currently estimated cost of about \$2 billion. The program would include ten Fleet Oilers (AO), five Destroyer Tenders (AD), two Submarine Tenders (AS), two Ammunition Ships (AE), three Combat Stores Ships (AFS), and ten Fleet Ocean Tugs (ATF). These ships would be delivered to the fleet between FY 1978 and FY 1983, leaving about 25 World War II-constructed ships still in the active fleet at the end of FY 1983. A total of \$209 million is included in the FY 1975 Budget to procure the first three ships—an AD, an AO, and an ATF.

D. TACTICAL AIR FORCES

The general purpose air forces—comprising the Navy carrier air wings, the Marine Corps aircraft wings, and the tactical aid units of the Air Force—are the most expensive component of the general purpose forces in terms of investment costs. In contrast to the land forces, which are heavy in personnel, the tactical air forces are heavy in equipment. And, because of the incessant growth in complexity, as well as in capability, each new generation of aircraft in the past has cost several times as much as the one it replaces, even after an appropriate adjustment is made for inflation. This growth in the cost per unit has, in turn, placed increasingly severe constraints on the number of new aircraft which could be procured each year.

But quantity as well as sophistication is essential if our general purpose air forces are to be able to perform successfully their assigned missions. No matter how effective a particular tactical aircraft may be, a certain minimum number is needed to cover a battlefield, a front or a combat theater; or to equip an aircraft carrier force. In view of the growth in the size and quality of the Soviet tactical air forces during the past few years and the further growth in capabilities projected over the next few years, I believe we stand in danger of falling below that minimum quantitative level if present trends are allowed to continue unabated. Consequently, here again we must apply the principle of the "high-low" mix, and the programs proposed in this area for FY 1975 reflect that application.

I noted in my discussion of the land forces that one conclusion drawn from the recent conflict in the Middle East is that major improvements in our field army air defense capabilities are required. Another conclusion we have drawn is that the defense suppression capabilities of our tactical air forces must be further improved. We learned that lesson earlier in Vietnam and a variety of actions, both technical and tactical, were taken to improve our capabilities in this regard. But the intensity and effectiveness displayed by the ground air defenses in the Middle East conflict impressed upon us even more compellingly the need to take still further actions to enhance the defense-suppression capabilities of our tactical forces.

Our tactical air forces not only represent a great investment of national resources, they are also a most essential element in our national defense strategy. We count on them to offset in part possible numerical inferiorities in land forces as compared to potential adversaries. And, particularly in the NATO-Warsaw Pact context, where we bear in relation to our allies a proportionately greater responsibility for tactical air, our tactical air forces serve as an "equalizer". Hence, we must ensure their continuing ability to perform their mission effectively.

That objective can be achieved, we believe, by providing our tactical air forces with improved self-protection radar warning (RW) equipment, tactical elec-

tronic warfare (EW) support forces, and a greater number and variety of improved defense-suppression weapons and devices. Both in Vietnam and in the Middle East, it has been demonstrated that tactical air forces which are provided with this type of support can successfully accomplish their mission even in the face of heavy, sophisticated air defenses. Accordingly, special attention is given to this need in the FY 1974 Supplemental and the FY 1975 Budget.

1. *Force Structure.*—The Navy will operate 15 aircraft carriers in FY 1975 with a total of 14 air wings. This arrangement is temporary, since the number of carriers is scheduled to decline to 12 later in this decade. At that time the number of wings will equal the number of carriers. Each carrier wing is normally assigned three attack squadrons (one medium and two light) and two fighter squadrons. The wings associated with the new NIMITZ-class carriers, however, will be provided an extra light attack squadron. When the last two HANCOCK-class carriers are retired, all the remaining A-4 and F-8 squadrons will be phased out of the active forces.

By end FY 1974 the three Marine Corps wings will consist of ten attack squadrons (five A-4s and five A-6s). Three HARRIER (AV-8A) squadrons, and 12 fighter squadrons (all F-4s), for a total of 25 squadrons. This structure will be continued through FY 1975, except that one squadron of F-4s will be replaced by the first squadron of F-14s.

The Navy and Marine Corps reserve, which at the end of FY 1974 will have a total of 18 squadrons (11 attack and 7 fighter), will be reduced to 17 squadrons in FY 1975 (11 attack and 6 fighters). These units, however, will be modernized over the next several years as F-4s and A-7s are released from the active forces.

The active Air Force at the end of FY 1975 will have a total of 69 squadrons in 22 wings. We propose to modernize substantially the equipping of this force during the next several years. All of the A-7 squadrons would be phased out and replaced by A-10s, and about half of the F-4 squadrons would be phased out and replaced by F-15s.

The A-7s and the F-4s released from the active Air Force would be used to modernize the Air Force reserve components. The Air National Guard at the end of FY 1975 will have a total of 27 tactical fighter and attack squadrons, 17 of which will be F-100s. All of these F-100s will eventually be replaced with A-7s and F-4s. The Air Force Reserve, which now has four A-37 and three F-105 squadrons for a total of seven squadrons, would be modernized by replacing the F-105s with F-4s.

In addition to the attack and fighter aircraft discussed above, the Navy, Marine Corps and Air Force also have a number of specialized electronic countermeasure aircraft which are specifically designed for defense suppression. The principal aircraft in this category is the EA-6. The Navy now has about 30 EA-6Bs and the Marine Corps has 23 EA-6As. The Navy's EA-6B inventory will be built up during the next few years to equip fully the 12-carrier force.

2. *Acquisition Programs.*—As shown on the table beginning on the following page, the FY 1975 Budget provides for both the near term and long term modernization of the general purpose air forces.

F-14

The largest single aircraft acquisition program for the Navy and Marine Corps is the F-14. We now plan to buy a total of 334 F-14s, enough to equip 12 squadrons for the Navy carrier air wings and four squadrons for the Marine Corps wings.

The F-14, as you know, is a two-place, twin engine, variable geometry, supersonic high performance carrier-based aircraft that has been designed particularly for fleet air defense. It has an all-weather capability to deliver the long range PHOENIX and medium range SPARROW air-to-air missiles, as well as a visual attack capability using an M-61 gun and the SIDEWINDER short range missile for close-in, air-to-air combat. Its primary role in fleet air defense is to destroy enemy bombers carrying air-to-surface missiles (ASMs) before the ASMs can be launched. Hence, the F-14/PHOENIX system's ability to operate at extended ranges from an aircraft carrier is crucial to successful fleet defense in the face of a significant air-to-surface missile threat at sea.

ACQUISITION COSTS OF MAJOR TACTICAL AIR FORCES MODERNIZATION AND IMPROVEMENT PROGRAMS ¹

(In millions of dollars)

	Fiscal year—		
	1973 actual funding	1974 planned funding ²	1975 proposed funding
Navy and Marine Corps aircraft:			
Continued development and procurement of F-14 multimission fighter.....	628	737	756
Acquisition of Phoenix missiles.....	99	100	100
Development of a new austere fighter, the VFX.....			34
Acquisition and modification of A-6 attack aircraft.....	241	184	199
Acquisition of A-7E attack aircraft.....	181	150	159
Acquisition of A-4M aircraft.....	2	(58)	67
Procurement of AV-8A Harrier aircraft.....	125	56	
Development of Navy V/STOL fighter.....	11	24	19
Acquisition of EA-6B aircraft.....	157	124	129
Acquisition of E-2C fleet early-warning aircraft.....	175	160	119
Procurement of F-5E aircraft.....		(10)	
Air Force aircraft:			
Continued development/procurement of F-15 air superiority fighter....	908	1,129	1,076
Development of lightweight fighter prototypes (including engine)....	43	47	23
Development of air combat fighter.....			36
Development and advanced procurement of A-10 close-air support aircraft.....	48	107	268
Acquisition of Maverick missiles.....	79	61	88
Development and procurement of E-3A (AWACS).....	194	163	770
Development of EF-111 jamming system.....	3	15	37

¹ Includes costs of R.D.T. & E. procurement of the system and initial spares, and directly related military construction.
² Figures in parentheses are the amounts included in the fiscal year 1974 supplemental.

Procurement of the F-14 began in FY 1971 and the first two squadrons entered the forces in FY 1973. The program, from a technical point of view, is progressing satisfactorily, but the financial aspects have caused great difficulties.

In March 1973, however, Grumman (the prime contractor), finally agreed to build the 48 aircraft in Lot V (FY 1973 funding) under the terms of the original contract (i.e., at the contract ceiling price) thus bringing the total number of aircraft under the contract to 134. In September 1973, the Navy and Grumman successfully completed negotiations on all outstanding issues relating to Lots IV and V (FY 1972-73 procurements) and signed a contract for the procurement of the next 50 aircraft funded in FY 1974. An equitable adjustment of \$18.3 million was allowed on Lot IV to cover both a six-month slip in the commencement of that Lot due to the effects of the crash of aircraft No. 1 and to provide for some additional tooling to increase production from four to six aircraft per month in order to recover the schedule. No adjustments were made on Lot V. The new airframe contract for the 50 aircraft funded in FY 1974 is a fixed-price incentive instrument with a target cost of \$281.5 million, a target price of \$306.5 million and a ceiling price of \$325 million.

The FY 1975 Budget includes a total of \$756 million for the F-14 program—\$12 million for R&D, \$674 million for the procurement of the next increment of 50 aircraft, and \$70 million for advance procurement. The production rate will be built up to six per month as previously planned, but two per month (for a period of 15 months) will be produced for the Iranian Air Force. The Government of Iran, as you know, placed an order for 30 F-14s and associated spares, missiles, etc. Twenty-four of these aircraft will be delivered to Iran in FY 1976 and the remaining six in FY 1977.

PHOENIX

The Phoenix long range air-to-air missile program is proceeding on schedule. The first units are now operational and about \$100 million is included in the FY 1975 Budget for the procurement of another 340 missiles and initial spares.

VFX

While some minimum number of F-14As is clearly essential for fleet air defense, we cannot afford, nor do we need, an all F-14A carrier or Marine Corps fighter force. Consequently, the Navy is now studying the characteristics of a

new austere, lower cost fighter (designated the VFX) to serve as the eventual replacement for the remaining F-4s, in both the Navy carrier and Marine Corps air wings. We believe this practical application of the high/low concept should be pursued as expeditiously as possible. Accordingly, \$34 million is included in the FY 1975 Budget to provide the option to commence engineering development of the VFX.

A-6E

A total of \$199 million is included in the FY 1975 Budget for the A-6E program—\$10 million for R&D, \$130 million for the procurement of 12 more A-6Es for the Navy, \$2 million for advance procurement, \$57 million for the modification of 48 A-6As to the A-6E configuration and \$.5 million for military construction. It is currently planned to complete the conversion of all Navy and Marine Corps A-6 squadrons to the A-6E configuration by FY 1978. Beginning in FY 1979, the Navy A-6E squadrons would be increased from the current nine UE to 12 UE per squadron. The Marine Corps A-6 squadrons already have 12 UE aircraft each.

A-7E

The FY 1975 Budget also includes about \$159 million for the A-7E program—\$8 million for R&D, \$147 million for another 34 A-7Es and \$4 million for advance procurement. During the next five years, all of the remaining A-7A and Bs in the active Navy units will be replaced with A-7Es and the older aircraft transferred to the Navy Reserve to modernize those forces.

A-4M

The \$58 million requested in the FY 1974 Supplemental for Marine Corps A-4Ms would provide for the replacement of aircraft furnished to Israel. The \$67 million requested in the FY 1975 Budget would provide \$58 million for the procurement of 24 more A-4Ms for the Marine Corps plus \$2 million for advanced procurement and about \$7 million for RDT&E. All of the remaining A-4Es and Fs in the active Marine Corps will be replaced by the much more effective A-4M, and the A-4Es and Fs to be transferred to the Marine Corps Reserve will replace the still older A-4Cs which were produced in the 1958-62 period.

NEW V/STOL FIGHTER

The \$56 million provided in FY 1974 will complete the funding of AV-8A (HARRIER) V/STOL fighter procurement for the three Marine Corps squadrons. The Navy, however, is now working on an advanced V/STOL technology development program consisting of three separate aircraft designs: the XFV12A prototype, with the thrust-augmented wing (TAW); a design with the lift-plus-lift cruise engine; and the Advanced Harrier. Because of the TAW's great potential, the Navy has given it first priority among the three designs, pending successful completion of development milestones in 1974. The first and most critical milestone, the thrust augmentation demonstration, is scheduled in March 1974. A full-scale lift demonstration is planned by the end of 1974. If successfully developed, this aircraft would be the prime candidate for use aboard the Sea Control Ship. The FY 1975 Budget includes \$19 million to continue this development effort.

EA-6B

As noted earlier, the Navy is still in the process of acquiring sufficient EA-6B electronic countermeasure aircraft to equip the 12-carrier force. The \$129 million included in the FY 1975 Budget would provide \$6 million for R&D and \$123 million for the procurement of an additional six aircraft.

E-2C

Last year the Navy planned to acquire a total of 30 E-2Cs, which together with the earlier model E-2Bs, would provide one squadron (4 UE aircraft) of Fleet Early Warning Aircraft for each of the planned 12 carrier air wings. The funds requested in the FY 1974 Budget were to provide for the procurement of the last nine of the thirty aircraft.

A recent review of the fleet early warning capabilities has persuaded me that it would be desirable to acquire at least six more E-2Cs. An inventory of 36 E-2C aircraft would permit the formation of a sixth squadron. This, in turn, would enable the Navy to maintain two squadrons forward (one each with the 6th and 7th Fleets) at all times on a normal one-in-three rotation cycle. The E-2C is markedly superior to the E-2B, particularly in a high threat environment and in overland target detection.

A total of about \$119 million is included in the FY 1975 Budget for the procurement of the six E-2Cs.

F-5E

The \$10 million included in the FY 1974 Supplemental for the F-5E would provide five aircraft for the Navy Fighter Weapons School, to replace five A-4s furnished to Israel. These F-5Es would be used in place of A-4s to stimulate the MIG-21 in the training of Navy fighter crews, a purpose for which they are much more suitable than the A-4s.

F-15

The F-15 is the first fighter in many years which has been specifically designed to excel in air-to-air combat. It will be armed with a new medium range air-to-air missile system and an improved close-in air-to-air missile system, as well as the proven M-61 20mm gun, and it should be superior to any fighter the Soviet Union is likely to deploy in the next 10-15 years.

Flight testing of the F-15 is proceeding satisfactorily and the aircraft has met all of its performance milestones on or ahead of schedule with the exception of engine qualification. The problem with the engine encountered last year has been resolved and the qualification test is now complete. On the basis of the test results to date, we believe the aircraft is technically sound and will be able to perform in full the mission for which it has been designed.

We now plan to buy a total of 729 F-15s. The first procurement of 30 F-15s was funded in FY 1973. Another 62 aircraft were funded in FY 1974. The FY 1975 Budget includes a total of \$1,076 million—\$183 million for R&D and \$893 million for the procurement of a third increment of 72 aircraft. The remaining 565 aircraft are scheduled to be procured in the FY 1976-80 period.

This schedule represents a stretchout of the procurement program planned last year. There are a number of reasons why this action would be desirable.

First, the revised production rate will better match the aircraft to the availability of its new air-to-air weapons.

Second, a slower production build-up will preserve options on the total quantity of F-15s to be procured, and allow a more orderly introduction of improved versions of the aircraft. Given the interest of several allies in this aircraft, keeping the production line open beyond the originally planned date may well result in some foreign orders for the F-15.

Third, while lower unit cost can be achieved at higher production rates, the cost of slowing the F-15 production build-up will be more than matched by the higher force and readiness levels which could be achieved during FY 1975 and 1976 through the use of funds that would otherwise have to be expended for a higher rate of F-15 production in those years. In sum, we believe the trade off between a faster rate of F-15 procurement and the retention of near term combat capabilities should be resolved in favor of the latter.

The FY 1973 and 1974 procurements will permit the Air Force to form a training squadron and the first two operational F-15 squadrons in FY 1976.

Lightweight Fighters and Air Combat Fighters

As in the case of the Navy, we cannot afford, and we do not need, an all high-capability fighter force in the Air Force. It was to meet the need for a fighter at the low-cost end of the high/low mix that the "lightweight" fighter prototype development program was initiated in FY 1972. This program involves prototype development by two contractors of two different experimental versions of a low-cost, visual combat fighter aircraft incorporating new, advanced aircraft design concepts. At the same time, the prototype development of a new advanced technology, high thrust-to-weight turbojet engine was also initiated.

The first of these "lightweight" prototype fighters (General Dynamics' YF-16) was rolled out last December and flew in January; the second (Northrop's YF-17) is expected to fly in April of this year. These experimental prototype fighters (two from each contractor) will be put through a comprehensive 12-month flight

test program during which we intend to assess the combat value of the many technological innovations incorporated in these aircraft.

On the basis of the work already accomplished in the experimental prototype lightweight fighter program, we believe that the development of a new low-cost, high performance fighter which can perform tactical air missions under visual flight conditions is entirely practical and should be vigorously pursued. Accordingly, we have included in the FY 1975 Budget \$23 million (\$13 million for the aircraft and \$10 million for the engine) to proceed with the experimental prototype lightweight fighter program on an accelerated basis, and \$36 million to start the development of a new Air Combat Fighter.

A-10

The A-10 represents another major application of the high/low mix concept. It incorporates in a relatively low-cost airframe all of the principal characteristics that are essential for close air support—maneuverability, responsiveness, lethality, survivability, long loiter time and simplicity. Armed with the high velocity 30mm GAU-8 gun, the MAVERICK air-to-surface missile and other ordnance, the A-10 promises to be very effective against tanks and other armored vehicles. Consequently, it would be particularly valuable in Europe, since the Warsaw Pact ground forces are very heavy in armor.

Testing of the two Fairchild prototype aircraft and the GAU-8 30mm gun is continuing. While Fairchild is now fabricating six full-scale development models of the A-10, the first of these is not expected to be delivered until December 1974. Furthermore, the GAU-8 gun, which is a key element of the A-10's armament, will not be ready for full-scale testing until late this year. Hence, the fly-off between the A-10 and the A-7, directed by the Congress last year, will have to be conducted with one of the two available prototype aircraft, which is not fully representative of the A-10 we propose to produce, and which will not have the GAU-8 gun.

By the end of this year, however, the GAU-8 gun/aircraft compatibility tests and two back-to-back 150-hour engine qualification tests should be completed. Based on the results of these tests and the A-10/A-7 fly-off, a decision will be made on the production of the A-10. Pending this production decision, we have included a total of about \$268 million in the FY 1975 Budget for the A-10 program—about \$94 million to continue development and to provide for the fabrication of four RDT&E aircraft, \$145 million for the procurement of the first 26 production aircraft, and \$29 million for advance procurement. We tentatively plan to buy a total of 729 A-10s to equip the planned active and reserve component squadrons.

MAVERICK

The Maverick air-to-ground missile promises to be one of the most cost-effective air-launched weapons in our inventory, particularly against such small, hard, moving targets as tanks and armored personnel carriers. The MAVERICK's performance in the recent Middle East conflict was quite impressive, although the conditions there were much more favorable for such electro-optical weapons than would be the case in Europe. The FY 1975 Budget includes about \$88 million for the procurement of another 6,000 Maverick missiles for the Air Force.

AWACS

Defense planners have been convinced for some time that future demands on our surveillance, warning and control capabilities in support of tactical air operations, particularly in the context of a European conflict, will be quite severe. This conviction was reinforced by the complexities of the surveillance, warning and control function in both the Southeast Asia and the Middle East conflicts.

Recent flight demonstrations in Europe, as well as the U.S. have confirmed the high potential of AWACS to meet this requirement for long-range airborne surveillance and warning, and positive and precise control of forces engaged in the full range of tactical air operations. We believe AWACS would also be capable of supporting ground, naval and amphibious operations by providing commanders with an integrated air-ground situation summary in real time. Finally, AWACS could assist in the NORAD air defense mission, since some of these aircraft would normally be based in CONUS as part of our general purpose forces mobile air defense pool.

Because of its potential effectiveness in the tactical role, as well as its inherent flexibility and mobility, we propose to continue AWACS engineering development and procure the first 12 aircraft in FY 1975. The final production decision would be made in December 1974, and would be based on the successful completion of the System Integration Demonstration flight tests, the Airborne Integration Laboratory and Software Development Laboratory testing, and studies of additional command, control and communications equipment needed to support the tactical mission. The FY 1975 Budget includes a total of about \$770 million for the E-3A program—about \$220 million for R&D and \$550 million for procurement.

We tentatively plan to buy a total of 34 aircraft, including the three test aircraft already available, which will be reconfigured as operational AWACS. Twelve more aircraft would be bought in FY 1976 and the last seven aircraft in FY 1977. In contrast to the first 12 (Block I) aircraft, the Block II aircraft would be fully configured for the tactical mission. Current planning for the Block II buy includes identifying joint Service requirements to assist in determining alternative equipment configurations and evaluating the impact of these alternatives for long lead time funding. We are also working with our NATO Allies, who have expressed interest in AWACS as a common system to improve NATO's air defense and command and control capabilities.

EF-111

The current inventory of tactical aircraft with the primary mission of defense suppression consists of two squadrons of F-105G Wild Weasel aircraft, two squadrons of F-4C Wild Weasel aircraft, and 35 EA-6Bs. The F-105Gs are scheduled to be replaced with advanced F-4 Wild Weasel aircraft in the late 1970s, and, as noted earlier, the authorized inventory of EA-6Bs is scheduled to increase.

The F-105G and F-4C Wild Weasel systems were developed using off-the-shelf hardware as a quick-reaction counter to the surface-to-air missile (SAM) threat in North Vietnam. Combat experience in that conflict, however, disclosed a number of deficiencies which the advanced F-4 Wild Weasel system, now under development, is intended to correct. But as the Middle East conflict demonstrated, our tactical air forces should be prepared to operate in a very intense air defense environment. To be able to do so effectively, the Air Force needs an airborne jammer with a much greater capacity than can be fitted into an F-4. The EF-111A, which would be an Air Force F-111A equipped with ALQ-99 jammers of the type used in the Navy EA-6B, is intended to fulfill that requirement. The \$37 million included in the FY 1975 Budget for this program would permit a continuation of the prototype development effort now in progress.

Defense Suppression Weapons and Equipment

In addition to specialized electronic countermeasure aircraft, defense suppression involves a wide variety of weapons and equipment, and these also deserve greater emphasis than they have been receiving. Accordingly, funds are included in both the FY 1974 Supplemental and the FY 1975 Budget to augment our capabilities in these areas.

The following are some examples of the increases that are provided in the FY 1974 Supplemental:

\$31 million to procure the Advanced Location Strike System (ALSS). The ALSS is an airborne/ground-based, all-weather system designed to locate air defense electronic emissions at extended ranges and to guide an air-to-ground weapon against the emitters. It uses time-of-arrival (TOA) techniques for emitter location and distance-measuring equipment (DME) for guidance of air-to-ground weapons.

\$3 million to improve the capability of ALSS to locate and identify electronic emitters more rapidly, to control simultaneously a greater number of DME guided weapons, and to make it more mobile.

\$75 million for new pods and modification of existing pods to improve the capability of our tactical aircraft to cope with the Soviet tactical air defense threat.

\$5 million to procure additional chaff dispensers for our tactical aircraft. As the Israeli Air Force has demonstrated, chaff, if used properly and in sufficient quantities, is an effective means of aircraft self-protection even against high

density SAM defenses. Chaff provides false targets to the SAMs and masks the aircraft from the SAM radars.

\$20 million to procure Radar Homing and Warning (RHAW) receivers for Air Force F/RF-4s, A-7s and F-111s. These receivers will provide real time warning of air defense electronic emissions directed at the aircraft, thereby enabling the pilot to initiate the proper countermeasures to degrade the air defenses.

\$23 million to procure 800 additional Shrike (AGM-45A) missiles. The Shrike is the major air-launched, anti-radiation missile (ARM) in our current inventory. It can be carried by all Navy attack aircraft and most F-4 and F-105 Air Force aircraft.

\$2 million to accelerate development of an infrared countermeasures system to protect Navy tactical aircraft from SA-7 type weapons.

\$4 million to accelerate development of the Highspeed Anti-Radiation Missile (HARM), a follow-on to the current ARM.

\$18 million to accelerate the development of guided glide bombs, initiate development of a long-range stand-off defense-suppression missile, and make other improvements in defense-suppression weapons.

Among the defense-suppression efforts included in the FY 1975 Budget are the following:

\$25 million to develop a Precision Emitter Location and Strike System (PELSS) based on Time of Arrival/Distance Measuring Equipment (TOA/DME) techniques. This system may be a modified ALSS or a new PELSS, depending on the cost effectiveness of possible improvements.

\$9 million to continue development of the Modular Guided Glide Bomb (MGGB-II). The MGGB-II is currently being developed as an area stand-off weapon for use with ground and airborne locator and strike systems.

\$18 million to continue development of HARM.

Passive Airbase Defense

Recent JCS and Air Force analyses have shown that hardened aircraft shelters that can completely protect aircraft from strafing, and also provide greatly improved survivability from other conventional munitions, constitute one of the most effective passive defensive measures we could take. The availability of such shelters for all of NATO's tactical aircraft could have a major influence on the outcome of a conventional war in Europe.

Shelters have been provided for all in-place and dual-based USAF aircraft in the NATO Central Region. At the urging of the U.S., the NATO Ministers approved in December 1973 the expansion of SACEUR's protection program to include 70 percent of U.S. rapid reaction earmarked aircraft scheduled for deployment to Europe. Even so, a sizeable number of the U.S. aircraft planned for later deployments to Europe would remain unsheltered.

To remedy this situation, we now propose to undertake a five-year program which would provide additional hangarages needed to shelter the entire USAF force of fighter, attack and reconnaissance aircraft planned to be deployed to NATO. Also included in this program would be other passive defense measures, such as dispersal and camouflaging, and protected POL storage areas, maintenance shops and similar essential facilities. Some \$65 million is included in the FY 1975 Budget for the first increment of this program. As a necessary complement to this program, we will also continue our efforts to encourage our NATO allies to fund adequate shelters for all of their tactical aircraft.

E. MOBILITY FORCES

I noted earlier that one of the most urgent improvements needed in our general purpose force posture is a major increase in our strategic airlift capability. An increase in our total mobilizable strategic airlift capacity is needed to enhance our ability to move large-scale reinforcements to Europe during the critical early weeks of a NATO-Warsaw Pact conflict. An increase in our active strategic airlift capacity is needed to enhance our ability to resupply an ally promptly in an emergency, without resort to a mobilization of the reserve forces. These enhanced capabilities, I am convinced, will greatly strengthen the deterrent to aggression against ourselves and our allies, in Europe and elsewhere; and they will also enable NATO to accept with greater confidence a NATO-Warsaw Pact mutual and balanced force reduction agreement which involves

a partial withdrawal of both U.S. and Soviet forces from the central region of Europe.

In addition to the strategic airlift forces provided by the Military Airlift Command (MAC) and the Civil Reserve Air Fleet (CRAF), our mobility forces also include the strategic sealift forces provided by the Military Sealift Command (MSC) and the U.S. Flag Merchant Marine, as well as the tactical airlift forces assigned to the Tactical Air Command, the Unified Commands, and the Reserve Components. The strategic sealift and tactical airlift forces also require improvement, but the first priority at this time must be given to the strategic airlift forces.

1. Strategic Airlift.—The military strategic airlift now consists of four squadrons of C-5As (79 aircraft) and 13 squadrons of C-141s (275 aircraft), together with an equal number of C-5A and C-141 Reserve Associate Units which do not have any aircraft of their own. These Associate Units are collocated during peacetime with the active force squadrons and assist in the operation and maintenance of the active force aircraft on a part-time basis. When mobilized, these units make possible a rapid increase in the rate of utilization of the active aircraft. In addition to these military assets, there are now 246 long-range commercial aircraft in the Civil Reserve Air Fleet, including 153 cargo-convertible and 93 passenger aircraft. These aircraft become available to the Defense Department upon activation of the CRAF.

The crucial importance of immediately available strategic airlift forces of substantial capacity was once again convincingly demonstrated during the recent Middle East conflict. We have every reason to believe that our ability to resupply the Israeli armed forces promptly and in sufficient quantity at the critical point in the conflict not only restored the military balance but also was one of the decisive factors in bringing about the cease-fire.

Throughout the period of the airlift, October 13–November 14, MAC C-141s and C-5s maintained a steady flow of supplies to Israel, including weapons, ammunition, spare parts, medical supplies and other material. More than 22,000 short tons of cargo were delivered during the period, with as many as six C-5A and 17 C-141 missions per day. The C-5A with a total of 145 missions accounted for almost 10,800 tons, and the C-141 with a total of 421 missions accounted for more than 11,600 tons. The C-5A averaged 74 tons of payload per mission, while the C-141 averaged 27 tons. Lajes Air Base in the Azores was the only intermediate point available for refueling and crew staging on these missions, which averaged 6,459 nm one way.

The C-5A, because of its ability to carry equipment too large or too heavy for other aircraft, was a key factor in the success of this airlift effort. The cargo moved by C-5A included M-60 and M-48 tanks, each weighing about 50 tons. Among the other large and heavy items airlifted by the C-5A were fuselages for A-4E aircraft, CH-53 helicopters, 175mm self-propelled guns weighing 29 tons each, the 155mm howitzers weighing 25 tons each. All of these items are air-transportable only in the C-5A.

A high degree of reliability was maintained during the airlift: the departure reliability rate for the C-5s was 96 percent and for the C-141s, 98 percent. At the same time, MAC also airlifted the UN peacekeeping force to Cairo; supported three JCS exercises, the SAC redeployment from the Pacific and 100 other special missions; and, in addition, maintained its regular cargo and passenger flights over its worldwide route structure.

Although the Middle East airlift was an impressive performance, it involved the movement of only about 22,000 short tons of cargo. In contrast, the deployment to Europe of the Army and Air Force units initially earmarked for a NATO contingency, together with their essential equipment and initial supplies, would involve the movement of more than a half a million short tons of cargo, albeit over a shorter distance—an average of about 4,700 nm one way vs. 6,450 nm in the case of the Middle East airlift. Moreover, given the well founded probability that the Warsaw Pact are geared for a short, intense war in Europe, plus the possibility that some of the U.S. forces currently deployed in Europe may be withdrawn in the future, there is a great premium on being able to move those forces and their equipment much more rapidly than is now planned. Clearly, under those circumstances, the first few weeks of a war in Europe could well be the most critical.

Hence, a dependable U.S. capability to deliver large scale reinforcements to Europe quickly in an emergency could not only be decisive in preventing a NATO defeat, it could also be decisive in deterring the attack in the first place. Indeed,

I can think of no more impressive a deterrent to a Warsaw Pact attack on NATO than a clearly demonstrable U.S. capability to put down in Europe a fully-equipped combat-ready division (including its supporting forces) every few days. That is why I am so firmly convinced that a major expansion of our strategic airlift capacity deserves a very high priority in the allocation of resources among our general purpose forces programs.

As matters now stand, it would take an average of about 19 days per division to move to Europe a force of several divisions with their Initial Support Increments and all of their combat essential equipment if we were to move them by airlift only. However, there are several actions we can take now to increase substantially our strategic airlift capabilities within the next few years.

C-5A and C-141 Wartime Utilization Rates

The first of these actions involves an increase from 2.0 to 2.75 in the active forces crew ratios for the C-5As and the C-141s, plus a commensurate increase in maintenance personnel and in the war reserve stocks of C-5A and C-141 replenishment spares. These increases would permit a sustained wartime aircraft utilization rate of ten instead of eight hours per day, and an initial surge wartime utilization rate (for a period of 45 days) of 12½ instead of ten hours per day. That would be equivalent to a 25 percent increase in the wartime capability of the MAC strategic airlift forces.

This action alone could reduce the average deployment time per division from about 19 days to somewhat less than 15 days. The additional cost would be \$200 million per year (\$160 million in FY 1975, the first year) for military personnel and operations and maintenance, plus a one-time cost of about \$130 million for war reserve spares. As shown on the following table, about \$109 million is included in the FY 1974 Supplemental and \$21 million in the FY 1975 Budget for the procurement of additional replenishment spares for this purpose.

C-141 Modification

The second action involves the modification of the C-141s to increase their usable payload capacity. As you probably know, the C-141 for most missions is space-limited, rather than weight-limited. Hence, by increasing the size of the fuselage we can increase the payload capacity without any significant loss of effective range or cruise speed.

More specifically, the C-141 modification would involve lengthening the fuselage by 280 inches (part fore and part aft of the wing), modification of the wing fairing and aircraft controls to reduce drag, and the installation of in-flight refueling (receiving only) equipment (The C-5As already have an aerial refueling capability.) These modifications will increase the payload volume of the C-141 by 30 percent; it will be able to carry 13 cargo pallets compared with the present 10. This improvement, which is equivalent to adding 90 C-141s to the airlift force, could further reduce the time required to deploy the planned force to an average of about 12½ days per division.

ACQUISITION COSTS OF MAJOR MOBILITY FORCES MODERNIZATION AND IMPROVEMENT PROGRAMS¹

[In millions of dollars]

	Fiscal year—		
	1973 actual unding	1974 planned funding ²	1975 proposed funding
Strategic airlift:			
Procurement of additional replenishment spares for C-5A and C-141 aircraft	23	(109)	21
Modification of C-141 aircraft to increase their capacity		(40)	50
Acquisition of 3d C-5A fatigue article		(6)21	
Planning and initial engineering of C-5A wing modification			16
Modification of civilian wide-bodied passenger aircraft to a convertible (cargo-passenger) configuration		(19)	155
Tactical airlift:			
Procurement of additional C-130 aircraft	94	(33)216	22
Prototype development of advanced medium STOL transport (AMST)	25	25	56

¹ Includes costs of R.D.T. & E., procurement of the system and initial soares, and directly related military construction.

² Figures in parentheses are the amounts included in the fiscal year 1974 supplemental.

Moreover, all of the MAC strategic airlift aircraft will have an air-to-air refueling capability and thus will be less dependent on foreign bases. Selected air crews, however, will have to be provided regular training in refueling techniques, which has not been the case in the past.

The cost to modify the entire fleet of 275 C-141s is estimated at about \$450 million. The impact of this modification on operating costs cannot yet be precisely estimated, but little or no increase is now believed to be involved. (The cost of adding 90 C-141s to the fleet would be about \$1.4 billion for procurement and \$135 million a year for operation.) We have included \$40 million in the FY 1974 Supplemental to commence engineering and tool design. Another \$50 million is included in the FY 1975 Budget to complete engineering, fabricate the tooling, and begin the modification of the first few aircraft.

C-5A Fatigue Tests

To reduce still further the number of days required to deploy the planned force we need even more airlift capability, especially the capability to carry large and heavy items of equipment. The C-5A was developed specifically for this role. Unfortunately, it is now out of production; furthermore, its wings are structurally deficient in relation to the original fatigue life goal. This deficiency has been alleviated in part by the incorporation of a new "load distribution" system in the wings, as recommended by the C-5A Independent Review Team. With this system, it is estimated that the service life of the aircraft may be as much as 18,000 to 20,000 hours, but as yet we have no empirical data to support that estimate.

To acquire that data in a more timely fashion, we now propose to accelerate the acquisition and test of the third fatigue article, which incorporates the new load distribution system. Accordingly, the \$5.8 million needed for this purpose has been included in the FY 1974 Supplemental (rather than the FY 1975 Budget as previously planned) thereby increasing the funds available for obligation in FY 1974 to about \$21 million.

C-5A Wing Modification

The Independent Review Team also recommended that a further and more extensive wing modification, which would extend the service life of the C-5A to at least 30,000 hours, be developed and installed. The Air Force estimates that this program would cost more than \$600 million for the 79 C-5As now in the force.

Inasmuch as these aircraft are accumulating an average of only about 1,000 flying hours per year, I believe we should obtain the complete fatigue test results on the current load distribution system modification before we commit ourselves to another, more costly modification. Pending the receipt of these results, however, I believe it would be useful to examine more closely the work involved, the benefits to be derived, and the most probable cost of this new modification program. Accordingly, \$15.5 million has been included in the FY 1975 Budget to initiate engineering and planning for this modification.

Wide-bodied Passenger Aircraft Modification:

In view of these problems, it would obviously be premature to consider the procurement of additional C-5As at this time. Moreover, we believe that a large amount of additional airlift capacity can be acquired at a far lesser cost through a Government-financed program for the modification of existing civilian wide-bodied passenger aircraft (Boeing 747s and McDonnell-Douglas DC-10s) to a convertible (cargo-passenger) configuration, and for the operation of these modified aircraft under the CRAF program.

Two cargo-configured 747s are now in commercial operation. These aircraft have a visor door in the nose and can accommodate all but "outsize" cargo (i.e., cargo that can be carried now only by the C-5A). By installing a large, side-loading cargo door aft of the wing trailing edge, however, the 747 could be configured to accommodate about one-third of the "outsize" cargo involved in moving the planned force. The remaining two-thirds of the "outsize" cargo would still have to be carried by the C-5As. Thus, the capacity of the existing C-5A force sets a practical limit on the expansion of our strategic airlift capability over the near term, that is until a new large cargo aircraft can be developed and produced, or the production of an appropriately modified C-5 can be resumed.

Assuming that we go forward with the two airlift proposals I discussed earlier (i.e., the increase in wartime utilization rates and the modification of the C-141s), the addition to the CRAF program of about 110 cargo-convertible 747s

(or their equivalent in DC-10s, calculated at about two-thirds of a 747) would bring our airlift capability up to the full potential permitted by the existing C-5A capacity. This strategic airlift force—the C-5As, C-141s, existing CRAF, plus about 110 convertible 747s—could airlift the planned force (including the Initial Support Increments) to Europe at an average rate of about seven days per division.

There are now about 110 U.S. airline-owned 747s in service. Another 55 747s are operated by the airlines of our NATO allies. In addition, U.S. airlines also operate about 100 DC-10s, but only about 20 are the long-range version. (The wide-bodied Lockheed 1011 is too short range to be considered in this context.)

Our current plan is to negotiate agreements with the U.S. airlines to make their 747s available for modification and then to operate them as part of the Civil Reserve Air Fleet. In order to ensure that these aircraft will be available in an emergency to operate into hostile areas in the same manner as the military airlift aircraft, we may need new legislation similar to that covering merchant seamen. This new legislation would require U.S. certificated commercial airline crews, in event of a national emergency declared by the President, to operate wherever the necessities of war may dictate.

We may also be able to work out some sort of an agreement with our NATO allies that would bring their 747s into the program. I have already discussed this matter in a preliminary way with some of the NATO Defense Ministers, but it is too early to draw any conclusions as to the prospects for such agreements.

The modification of the 747 passenger aircraft to a cargo-convertible configuration would involve the installation of a nose visor cargo door and/or a large side-loading door, the strengthening of the upper cargo deck, and the installation of a cargo floor weight distribution system. The modification cost per aircraft would be about \$5.6 million with the nose door only, and \$6.6 million with both doors. Since these aircraft would be out of service during the period of modification, the airlines would have to be paid compensation for the loss of revenue, which we believe would amount to about \$800,000 per aircraft. In addition, the convertible feature would increase the operating cost to some extent; this might amount to about \$400,000 per aircraft over a ten-year period.

Finally, we may have to provide the airlines with some sort of an incentive payment for assuming the additional obligations and inconveniences involved in this program. Heretofore, we have relied upon the award of peacetime airlift contracts as the principal inducement for the air carriers to participate in the CRAF program. With the sharp decline in contracted airlift following the withdrawal of U.S. forces from Vietnam, there will not be enough Defense business to provide the necessary incentives for an expanded CRAF program.

Taking all of these factors into account, the cost to the Government could amount to about \$9-10 million per modified 747.

The long range DC-10s could be modified with a side-loading cargo door and a strengthened upper cargo deck for about \$5 million per aircraft. Although these DC-10s can carry about two-thirds of the payload weight of a 747, they are height limited and therefore cannot carry many items of military equipment. Hence, they would be useful primarily as bulk carriers, as are the existing CRAF aircraft.

In addition to the modification of the aircraft, we must also develop and procure the new Material Handling Equipment (MHE) needed to load and unload military equipment expeditiously. In contrast to the C-5A and C-141, whose main cargo decks are at about truck-bed height, the main cargo decks of the 747 and DC-10 are about 16 feet above ground level. The cost of acquiring the new MHE, however, would be relatively small in relation to the cost of modifying the aircraft.

To start this wide-bodied passenger aircraft modification program promptly, we have included \$19 million in the FY 1974 Supplemental to initiate engineering and planning, and \$155 million (including \$5 million for MHE) in the FY 1975 Budget to complete engineering and tooling, and to modify the first 10-12 747s.

Admittedly, there are many other problems, besides the availability of airlift, that must be solved if we are to develop a capability to move large forces to Europe promptly in an emergency. The forces to be moved must be maintained in a state of readiness commensurate with the expanded airlift capability. Ap-

propriate actions must be taken to ensure the availability of adequate airport facilities to assemble and load the cargo at the point of departure and to unload and clear the cargo at the point of arrival. And, of course, there is the question of vulnerability at the point of arrival, which in turn is related to the question of strategic warning. Assuming we are able to detect a Warsaw Pact mobilization within a week after it begins, we may be able to close a large part of the force before the start of hostilities. In any event, a clear and convincing U.S. capability to move large forces quickly overseas in an emergency should provide a powerful deterrent against attack.

2. *Sealift.*—The DOD-controlled sealift capability, which is already quite limited, will continue to decline. In the late 1970s the Military Sealift Command force is expected to consist of only two Roll On/Roll Off cargo ships and eight tankers, plus three cargo ships and ten tankers on controlled fleet charter.

Nine of the ten tankers are being acquired through a build and charter arrangement and do not involve any capital investment by the Defense Department. These tankers are relatively small, shallow draft ships used primarily to transport POL into smaller, less developed ports. All nine are scheduled to be available to the MSC-controlled fleet by the end of FY 1975.

Last year it was planned to acquire two Multi Mission Ships (MMS), also through a build and charter arrangement. A lack of response from the shipbuilding industry because of the limited number of ships contemplated, however, has caused this program to be reevaluated. Thus these ships will not be available to MSC in FY 1975 as originally scheduled. Instead, we have now scheduled one ship to be available in FY 1976 and the second one in FY 1977.

Notwithstanding our current emphasis on strategic airlift, we will still need a substantial sealift capability to sustain and augment the forces initially deployed by airlift. Even in a NATO-Warsaw Pact conflict some of the later deploying forces (e.g., Army reserve component divisions and their support increments) would have to move by sea, as would the bulk of the resupply for all of the U.S. forces already deployed. Sealift accounted for 96 percent of the tonnage moved to Vietnam during the course of that conflict, and even with the expanded airlift, it will no doubt account for a high percentage of the tonnage moved in any other sustained conflict in which we may become involved in the future.

Since the capability of the DoD-controlled sealift will probably be insufficient to support even a minor contingency in a timely fashion some years hence, heavy reliance will have to be placed on the U.S. Merchant Marine and, in the case of a NATO conflict, on the commercial fleets of our NATO allies as well. The National Defense Reserve Fleet, which stood us in good stead during the Vietnam war, now consists of the 130 ships which are currently scheduled to be phased out in FY 1978.

The sealift problem is not so much a matter of total capacity as it is of early availability of suitable ships. Given sufficient time to assemble the ships, the U.S. Merchant Marine, augmented by up to 200-300 NATO flag ships, could provide more than enough sealift to meet even the most demanding NATO contingency. Consequently, the principal emphasis in this area has been placed on early availability, not only in a mobilization declared by the President, but also for lesser contingencies not involving mobilization.

With regard to the mobilization contingency, a major step forward was taken last year in conjunction with our NATO allies to increase the availability of NATO flag shipping in the event of a major U.S. deployment of forces to Europe. Under the agreement reached last September, the NATO Defense Shipping Executive Board (DSEB) which is designed to control in wartime the more than 3,000 deep draft, dry cargo vessels in the NATO shipping pool, would be activated promptly upon the declaration of a NATO mobilization. Some 300 suitable NATO flag ships (primarily break bulk and some roll-on/roll-off), which normally frequent U.S. East and Gulf Coast ports, would be "earmarked" in peacetime to facilitate their early acquisition in a contingency. These ships would be channeled to U.S. on-load ports in response to specific U.S. deployment requirements. We have assured our NATO allies, however, that European flag ships would not be requested if suitable U.S. flag ships were available.

With regard to contingencies involving the deployment of perhaps one or two divisions, the Defense Department has been striving for a number of years to develop a system which would provide sufficient commercial sealift without the declaration of a mobilization by the President. The MSC under the Sealift Readiness Program has obtained commitments from the commercial shipping lines to

make at least 117 ships available for such a lesser contingency, with at least half to be available in the first 30 days.

One of the key difficulties inherent in this Sealift Readiness Program is that operators would risk the loss of their regular trade routes to other U.S. as well as foreign lines if they took their ships off those routes to carry Defense cargo for any substantial period of time. This problem emerged briefly during the Vietnam conflict. However, we were still able to draw on the Victory ships in the National Defense Reserve Fleet (NDRF), and there was still a large number of World War II-built ships in the Tramp fleet. Now, however, the Tramp fleet is just about gone, and the ships presently in the NDRF are scheduled to be retired in FY 1978.

It is apparent to us that before that time arrives we should examine again the need for a capability of the sort now represented by the NDRF. A revitalized NDRF would fit in well with the Sealift Readiness Program. We would have to rely on the berth line industry only during the initial stages of a non-mobilization contingency, until the NDRF ships could be broken out of the reserve and placed back in service. This arrangement would limit the deleterious effect on the competitive position of the berth line operators. We believe that the Defense Department, together with the Maritime Administration, should reexamine the feasibility of continuing some of the ships still in the NDRF beyond FY 1978, as well as the possibility of adding newer ships to the NDRF to replace or supplement the old Victory ships. Meanwhile, the National Academy of Sciences has undertaken a study to determine whether the berth line industry can respond to long or short term nonmobilization emergencies without loss of their competitive position, which eventually could result in a reduction of the U.S. flag fleet, thus eroding our sealift mobilization base.

Another problem involving the Defense Department's relation with the U.S. shipping industry concerns the manner in which we procure sealift in peacetime. Under the present so-called MAX-MIN procedure no shipper is permitted to carry more than 50 percent of DoD cargo on most MSC routes (75 percent on a few), and the low bidders must agree to reserve a minimum of 25 percent of their capacity for Defense cargo. This system preserves the competitive principle, while at the same time it places some restraints on competition in the interest of maintaining a broad mobilization base. A bid rank or "pecking order" is established among the bidding lines, and the cargo is then allocated to the low bidders among the carriers actually offering service on a given route.

Last August the Maritime Administration (MARAD), supported by the Federal Maritime Commission (FMC) and most of the berth line operators, proposed a cargo allocation system whereby all carriers offering service on a route would be assured of some cargo, with the amount allocated to any one carrier being a function of the "bid" spread. Their contention is that the MAX-MIN procedure causes large fluctuations in cargo allocations as the positions of the carriers in the bid rank change from one bidding cycle to the next. MARAD and FMC believe that these fluctuations create a "feast-or-famine" situation which is particularly harmful to those carriers in poor financial condition, and which could lead to erosion of the sealift mobilization base. While we fully appreciate the concern of the Maritime agencies and the industry, we do not believe the evidence thus far presented is sufficiently convincing to justify either the relaxation of competition or the acceptance of the additional costs that would necessarily be involved.

3. Tactical Airlift.—The tactical airlift forces at the end of FY 1974 will consist of 17 C-130 squadrons (with about 325 aircraft) in the active force and 36 units (with about 370 aircraft, mostly C-130s) in the Air Force reserve components. We plan to maintain essentially the same force levels through the late 1970s, but with some further modernization of the reserve component units, which account for about 40 percent of our total tactical airlift capability. During the next few years all of the remaining C-124s and C-123s in the Air National Guard will be replaced with C-130s.

We are also taking action to reduce the overhead and command structure of the reserve components by consolidating certain units which are colocated at the same installation. Four AFR and two ANG units, which were previously programmed to have eight UE C-130 aircraft each, are now being combined to form two AFR and one ANG squadrons with 16 UE aircraft each, the same size as the active force squadrons. This change will enable us to achieve an annual saving of about \$2.7 million with no loss in wartime capability.

C-130

The C-130 is probably the most versatile and reliable tactical airlift aircraft in the world and is now in use by many other nations. Procurement of the C-130 for U.S. forces had been expected to be completed with the FY 1974 buy, but once again our inventory of C-130s has been reduced, this time by the transfer of aircraft to Israel. Accordingly, \$33 million has been included in the FY 1974 Supplemental for the procurement of six more C-130s for the Air Force. Another \$22 million is included in the FY 1975 Budget for four additional C-130s to replace two C-130s and two C-7s which are expected to be transferred from the Air Force Reserve to South Vietnam as attrition replacements.

Although no further procurement of C-130s for U.S. forces is planned, the production line is expected to remain open during the next few years to meet the demands of other nations. Thus, we will have the option to procure additional C-130s later on if that proves to be necessary.

AMST

While the C-130 is a proven, effective aircraft, we continue to believe that tactical airlift modernization will eventually be needed, probably sometime in the 1980s. The objective of the Advanced Medium STOL Transport (AMST) prototype program is to demonstrate new STOL technology and provide an option to replace not only the C-130, but also the current STOL aircraft, the C-7 and C-123.

I am aware that there has been considerable opposition in the Congress with regard to the AMST program and that the FY 1974 budget request for that program was cut from \$67 million to \$25 million. The two basic objections registered were: (1) that the AMST would need an advanced turbofan engine (the development of which had been terminated) to be effective; and, (2) that it will be too expensive relative to the proven C-130.

The Air Force maintains that a new engine is not needed, and points to the fact that both prototype contractors are using proven engines that will meet the established design and performance goals. As for costs, two of the principal objectives of the prototype program are to obtain visibility on costs and operational factors associated with short field performance, and to define engine and airframe characteristics which would substantially reduce maintenance support requirements.

The two contractors involved, Boeing and McDonnell-Douglas, are each building two prototypes and are using different powered lift concepts for achieving improved STOL performance. The total cost of the four aircraft prototypes, assuming a continuation of both contractors' programs, would be about \$210 million, and there is no commitment to engineering development or production. Because of their different technical approaches to powered lift, the fabrication and testing schedules of the two contractors differ. Major assembly by McDonnell-Douglas began in late 1973; Boeing is scheduled to begin in mid 1974. First flight as well as completion of the one-year flight test program differ for the contractors by a similar period of about half a year.

The current design-to-cost goal for AMST is now being reexamined. But as a practical matter, we will not have a sound basis for estimating the production costs of the AMST, or for determining whether it will be an economically attractive alternative to the existing or a modified C-130, until the prototype phase of the program is completed.

On balance, I believe that we would be best advised to proceed with the AMST prototype program, and about \$56 million has been included in the FY 1975 Budget for that purpose. The bulk of the funds would be devoted to the fabrication and assembly of the prototypes. In addition, the propulsion systems would be verified, and tests of structural components begun. Because the impact of the \$42 million reduction in the FY 1974 request has not as yet been fully assessed, and because each of the contractors is using a different technical approach, I cannot state at this time whether one of the contractors will be eliminated, or the work of both stretched out. I hope by the time the Air Force witnesses appear before this Committee the matter will have been resolved.

IV. MANPOWER FOR DEFENSE

The Department of Defense will complete during FY 1975 its transition to a peacetime force structure. The last of the draftees will have concluded their required service, and we will begin to see whether the volunteer force will receive the measure of support needed to maintain the Armed Forces in the size and quality required for the nation's security. It is clear that the volunteer force concept cannot prove a success unless the Armed Forces do have the full support of the people and the Congress.

For our part, we in the Department are doing our best to make the volunteer force succeed and at as low a cost as possible. With this in mind we have set ourselves the following manpower objectives for FY 1975:

To attract and retain a sufficient number of people of adequate ability to maintain the peacetime force structure and state of readiness needed to protect our national interests.

To use personnel more efficiently.

To continue improving the living and working conditions in the military services.

As has been mentioned previously in this report, U.S. forces are now much smaller than they have been in more than two decades. By the end of FY 1975, our military manpower strengths, as shown in the table on the following page, will have been reduced almost 40 percent from the 1968 Vietnam peak. Civilian manpower has been similarly reduced, although to a lesser extent—largely due to increased civilianization of military positions.

This reduction in our active forces still leaves us with a formidable recruiting task—one young man in three of those qualified and available must volunteer for military service if we are to meet our goals.

The smaller size of our active forces also means that the Reserves and National Guard are assuming greater importance in our total security posture. But if they are to play the role required of them in these new strategic and manpower circumstances, improvements in both organization and readiness will be required. I will say more about this later.

ACTIVE DUTY MILITARY PERSONNEL

[End of fiscal years in thousands]

Fiscal year	Total DOD	Army	Navy	Marine Corps	Air Force
1950 (pre-Korea).....	1,460	593	382	74	411
1952 (peak-Korea).....	3,636	1,596	824	232	983
1964 (pre-Vietnam).....	2,687	973	668	190	857
1968 (peak-Vietnam).....	3,548	1,570	765	307	905
1974.....	2,174	782	551	196	645
1975.....	2,152	785	540	196	630

Note: Totals may not add due to rounding.

DIRECT-HIRE CIVILIAN PERSONNEL—MILITARY FUNCTIONS

[End of fiscal years, in thousands]

Fiscal year	Total DOD	Army	Navy/Marine Corps	Air Force	OSD-JCS and other Defense agencies
1950.....	715	266	293	154	2
1952.....	1,308	515	481	310	2
1964 ¹	1,035	360	332	305	38
1968 ¹	1,287	462	419	332	75
1974.....	1,029	356	326	270	76
1975.....	1,027	359	324	270	75

¹ These totals include Army and Air National Guard technicians who were converted from State to Federal employees in fiscal year 1969. The fiscal year 1964 and 1968 totals have been adjusted to include approximately 38,000 and 39,000 technicians respectively. The fiscal year 1968 total excludes 32,000 disadvantaged youth employees.

² Includes 19,000 positions in fiscal year 1974 supplemental.

Note: Totals may not add due to rounding.

A. THE VOLUNTEER FORCE

The last draft call was issued at the end of 1972. When induction authority officially expired on July 1, 1973, a total of 51,000 draftees remained in uniform. By the end of fiscal year 1975, the last conscripted soldier will have completed his required service, and the active forces for the first time in more than a quarter of a century will be manned solely by volunteers.

Making the volunteer force work is one of our highest objectives. While the challenge is considerable, our resolve is firm. A comparison of the numbers of true volunteers from previous years with projected future year requirements provides some indication of the magnitude of the task ahead.

[Amounts in thousands]

	Estimated true volunteers, ¹ fiscal year—			Enlisted accession requirements (projections), ¹ fiscal year—				
	1971	1972	1973	1974	1975	1976	1977	1978
Army.....	102	127	165	201	217	185	180	170
Navy.....	50	75	84	83	90	95	80	85
Marine Corps.....	42	49	54	59	53	55	55	55
Air Force.....	59	72	88	75	78	100	90	75
DOD ²	253	323	390	419	438	430	405	385

¹ All sources: Men, women, prior service, nonprior service.

² Totals may not add due to rounding.

At this point, I would like to review the major problems encountered to date in moving to the all-volunteer concept.

1. Active Forces

(a) *Strengths.*—Total military strength at the end of December 1973, was 98 percent of original Service planning objectives. The principal shortages were in the Army and the Navy, with the Army's shortage largely attributable to recruiting shortfalls and the Navy's to revised Service planning for FY 1974. (It should be noted that strength shortfalls of this magnitude and larger also occurred periodically during the era of the draft.) The strengths, by Service, are shown in the following table.

MILITARY STRENGTH, DEC. 31, 1973

[In thousands]

	Requirement ¹	Actual	Shortfall
Army.....	802	782	20
Navy.....	566	556	9
Marine Corps.....	194	189	4
Air Force.....	674	674	0
Department of Defense.....	2,235	2,202	33

¹ Fiscal year 1974 President's budget.

Note: Totals may not add due to rounding.

We estimate that the Navy and Air Force will, at the end of FY 1974, be close to their revised end strength authorizations. The Army, which is 2½ percent short of its prescribed end strength, has in the last four months met 95 percent of its recruiting objectives. This is a favorable development, but it

would be premature to regard it as a harbinger of success, especially in light of the requirement recently imposed by the Congress that at least 82 percent of all new enlistees be of average or above average mental ability and that at least 55 percent of all new enlistees be high school graduates.

(b) *Accessions: (1) Non-prior Service Enlistments.*—The category of military manpower that presents the most difficult recruiting challenge is, of course, that of non-prior service male enlisted personnel, which accounts for the bulk of the annual accessions to the military forces. The acquisition of other categories of personnel—officers, women, prior service enlistees—while not entirely free of problems, is a more manageable undertaking. The successful attainment of an all-volunteer force, therefore, rests heavily on our ability to acquire a sufficient number of qualified non-prior service male enlistees for both the active and the reserve forces.

Assuming an active duty strength of about 2.2 million men and a Selected reserve (i.e., drill pay) strength of about 1 million men over the next five years, we estimate that we will have to acquire about 460,000 non-prior service male enlistees each year—about 360,000 for the active forces and 100,000 for the reserve forces. Recruiting that number of men each year will require the enlistment of about one out of every three militarily qualified and available (non-college) males under the age of 23 years. This goal, on the face of it, may initially appear unattainable. But the actual performance in calendar year 1973, particularly with respect to the active forces, was not far off that mark. As shown in the table on the following page, the four Services together recruited approximately 327,000 non-prior service male enlisted personnel, about 91 percent of the total number required.

(2) *Prior-service Reenlistments.*—One of the brightest spots in the All Volunteer Force program has been the success the services have achieved in reenlisting prior-service personnel. Not only does this reduce the requirement for non-prior service personnel, but it substantially lowers training costs.

In November 1973, the Services attained 110 percent of their objective for prior-service accessions. In December, the figure rose to 119 percent. Overall, in the first half of FY 1974, the Services have attained 104 percent of their objective. Special efforts are being made to ensure that we continue this high level of achievement. The upswing in recent months would indicate that these efforts are meeting with success.

(c) *Quality.*—The mental ability requirement specified by the Congress is not expected to pose a serious recruiting problem. As indicated in the following table, all of the Services except the Army have been able, thus far, to meet the 82 percent mental standard, and the Army is only slightly below that standard.

PERCENT OF NONPRIOR SERVICE ENLISTED ACCESSIONS IN MENTAL CATEGORIES I, II, AND III (AVERAGE AND ABOVE)

	Fiscal year—		
	1964	1973 ¹	1974 (July-December)
Army.....	80	84	81
Navy.....	89	84	97
Marine Corps.....	91	84	93
Air Force.....	96	96	99
All DOD.....	85	87	89

¹ Includes draftees.

NONPRIOR SERVICE MALE ENLISTMENT, CALENDAR YEAR 1973

(In thousands)

	Program objective	Actual accessions	Percent achieved
January-March:			
Army.....	38.7	35.7	92.2
Navy.....	14.0	14.3	102.1
Marine Corps.....	11.8	11.4	96.6
Air Force.....	20.0	20.0	100.0
DOD.....	84.5	81.4	96.3
April-June:			
Army.....	33.5	25.6	76.4
Navy.....	22.9	16.3	71.2
Marine Corps.....	10.9	11.3	103.7
Air Force.....	19.1	19.1	100.0
DOD.....	86.4	72.3	83.7
July-September:			
Army.....	52.1	41.5	79.7
Navy.....	24.5	23.7	96.7
Marine Corps.....	16.0	13.7	85.6
Air Force.....	18.5	18.7	101.1
DOD.....	111.1	97.6	87.8
October-December:			
Army.....	40.6	37.8	93.1
Navy.....	13.6	13.7	100.7
Marine Corps.....	11.0	9.8	89.1
Air Force.....	13.9	14.0	100.7
DOD.....	79.1	75.3	95.2
Calendar year total:			
Army.....	164.9	140.6	85.3
Navy.....	75.0	68.0	90.7
Marine Corps.....	45.7	46.1	92.8
Air Force.....	71.5	71.8	100.4
DOD.....	361.1	326.5	90.4

¹ Individual service strength plans. Program objectives exclude add-ons to compensate for previous shortfalls.

Indeed, the trend for the Department as a whole shows some improvement, particularly compared with FY 1964, the last pre-Vietnam draft year. Moreover, these new entries into military service compare very favorably with the 17-22 year age group of the non-college civilian population, of which only 64 percent are in mental categories I, II and III.

The 55 percent high school graduate standard, however, could cause recruiting difficulties for the Army and the Marine Corps. As shown in the following table, the Marine Corps has been below that level for some time; and the Army fell below it in the first six months of FY 1974. Consequently, it is possible that, at least in part because of this limitation, both the Army and the Marine Corps could fall short of their currently planned June 1974 end strengths.

PERCENT OF NONPRIOR SERVICE ACCESSIONS THAT ARE HIGH SCHOOL GRADUATES¹

	Fiscal year—		
	1964	1973	1974 (July to December)
Army.....	67	60	54
Navy.....	58	71	73
Marine Corps.....	61	51	51
Air Force.....	84	87	96
All Department of Defense.....	68	68	66

¹ Includes draftees.

The Department will, of course, abide by the mental qualification and high school graduation standards prescribed by the Congress. But it should be borne in mind that there are other quality attributes that, while less measurable, can be equally or more important from a military point of view. These attributes include motivation, physical condition, trainability and moral background. The young man who really wants to serve in the armed forces of the United States, and who has the physical capacity and mental aptitude to adapt readily to the stresses and strains of military life is a very valuable asset, particularly in the combat arms. It is not apparent that the nation can afford to deprive itself, arbitrarily, of the services of such men just because they do not have a high school diploma.

I believe it would be prudent, therefore, to give the Services some degree of discretion in making exceptions to the two general standards established by the Congress. Each potential recruit should be treated as an individual, taking into account all of his qualifications for a particular military job, not just his general intelligence and level of formal education achieved.

In an attempt to further refine existing quality standards, the Services are moving away from the use of the Armed Forces Qualification Test (prescribed by the Department of Defense during the draft) as the principal measure of mental ability. Much greater use is now being made of specialized aptitude tests for determining initial eligibility for military service and for assignment to a particular occupational specialty. These tests assess a wide range of skill aptitudes and assist the Services in determining the military jobs for which an individual is best qualified. In this respect, they are proving to be a more reliable indicator of job performance than either high school graduation or mental category status. In point of fact, high school graduation appears to be a better indicator of prospective disciplinary problems than of ability to perform a job.

Moral standards are also a measure of potential disciplinary performance. In this area, we strictly limit the number of enlistment waivers granted for felony policy records and for drug usage. In the Army, for instance, the number of such waivers has been reduced from 5.6 percent of accessions in FY 1970 to 1.4 percent in FY 1973.

In the present voluntary environment, the Army can now use the first several months of service to screen out those who prove to be disciplinary or motivational problems. Although there may be an increased cost in terms of attrition rate, it is on balance a more cost-effective method of retaining the largest number of qualified men from the available pool.

In general, our experience to date has not supported initial apprehensions that ending the draft would result in a degradation in quality. Standards of enlisted in-Service performance have been maintained, and unit readiness has not only been sustained but is improving as personnel turnover is reduced.

(d) *Costs.*—Claims that the major cost of military personnel is largely attributable to the volunteer force effort are in error. The largest single factor in growing manpower costs has been pay increases designed to achieve and maintain comparability with civilian sector wages. It is important to recognize that the principle of maintaining comparability, established by law in 1967, predates the decision to pursue a volunteer force. There is no question that comparability would have been necessary in achieving a volunteer force, but the principle itself is sound, with or without the draft, and stands on its own merits.

Estimates of the cost of the volunteer force vary depending on what programs the estimator choose to include as being directly or indirectly attributable to the decision to end conscription. The range of estimates shown below results from various plausible assumptions about which budget programs should be attributed to the volunteer force effort.

RANGE OF ANNUAL AVF COSTS

[In millions of dollars]

	Case I (base costs)	Case II (direct volunteer programs)	Case III (maximum attributable costs)
Fiscal year:			
1974.....	733.6	3,032.6	3,745.9
1975.....	743.4	2,977.9	3,677.4

Case I (Base Costs). The Case I estimate is, in our opinion, the most realistic estimate of Volunteer Force cost since it reflects additions to Service budgets after FY 1971 for programs considered absolutely essential to making the conversion. In both 1974 and FY 1975, more than one-third of the total cost represents expansion of active and reserve forces recruiting/advertising programs. Another third is comprised of legislated compensation programs such as the ground combat enlistment bonus¹ and R.O.T.C. scholarships. The remaining third accounts for such programs as education and travel entitlements and improvements in living conditions and services.

Case II (Project Volunteer Programs). This mid-range estimate covers, in addition to Case I costs, the budget costs associated with "Project Volunteer" programs. These are the pay and allowances increases granted in November 1971, to provide pay comparability with the civilian sector for junior officer and junior enlisted personnel. It is our view, as it was that of the Gates Commission, that these pay and allowance increases should have been provided as a matter of equity. It is for this reason that we do not feel these costs are properly chargeable to the all volunteer force as such.

Case III (Maximum Attributable Costs). This estimate includes all programs, however remote, which can in any way be related to the AVF effort. These additional costs, amounting to over \$600 million in both FY 1974 and FY 1975, are primarily for programs to improve the living and working conditions of Service men and women. About three-quarters of this amount represents Army costs for barracks construction programs and the civilianization of certain menial non-mission oriented tasks. While these programs may have aided the successful conversion to an AVF, they are actions which would or should have been taken in any event.

With the exception of Case 1, a modest decline in cost is projected for FY 1975 as compared with FY 1974 owing to a smaller force size and downward adjustments in grade structure.

None of these cost alternatives take into consideration the concept of the "net cost" of the volunteer force. All of the estimates would be lower if savings from other agencies and activities were taken into account, such as the reduced Selective Service budget and diminished training and Permanent Change of Station (PCS) costs made possible by increases in lengths of enlistment.

Most important are the substantial cost savings resulting from reduced personnel turnover. In FY 1971, for example, two-year enlistments represented 76 percent of total enlistments in the Army's Combat Arms. Today only nine percent of that total are two-year enlistments. This represents an increased utilization per training dollar of 57 percent. During the high draft years (1967 to 1969) each military accession contributed an average of 3.3 productive man-years, including an allowance for reenlistment experience. Today each accession contributes an average of 4.1 productive man-years. After FY 1975, this figure is expected to increase to 4.5 productive man-years. We estimate that the annual reduction in costs that will flow from these changes will amount to between \$400 million and \$500 million in FY 1975 and between \$500 and \$600 million in FY 1976 and beyond.

There has been some conjecture concerning a possible need to return to a system of conscription. Before the nation entertains any thoughts along these lines, we need additional experience with the volunteer force. I would also caution that the cost savings associated with a return to the draft appear to be minimal—on the order of \$300-\$400 million annually (not considering the offsetting effects on costs of increased personnel turnover that would follow). This is assuming that present levels of pay would not be reduced were we to revert to the draft.

(c) *Problem Areas:* (1) *Army Recruitment.*—One of the most pressing problems we have been facing in the "all volunteer" atmosphere has been that of recruiting shortfalls in the Army, where many jobs are viewed as being less than attractive and where enlistment requirements are more than twice those of any other Service. The reasons for the shortfalls are several and varied. A general reason has been the post-Vietnam disenchantment with the military in general—disenchantment characterized by indifference. Until this indifference changes into positive support, we will continually be challenged in meeting Army accession requirements. The other causes underlying the shortfalls relate to the application of quality standards and to numbers of recruiters.

With respect to quality standards, in February 1973, the Army limited male non-high school graduate recruitment to 30 percent of its monthly enlistment

¹ Includes the pending Armed Forces Enlisted Personnel Bonus Revision Act with a full year cost of \$77.8 million.

total in an effort to increase high school graduate enlistments. Prior to this, the male volunteer non-high school graduate enlistee intake had been running about 48 percent. The loss of large numbers of potentially good soldiers from the non-high school graduate pool prompted the Army to return in July 1973, to a program which maximized the intake of high school graduates without limiting non-high school graduates. During the time that the 30 percent restriction was in effect, the Army recruited 13,800 fewer non-high school graduates than it did during the same period the previous year. Since supply is highly sensitive to high school graduation status (for FY 1975 the difference between a 70 percent and 55 percent high school screen would mean approximately 37,000 accessions), this type of screen will have to be carefully set and controlled.

Another major cause for recruiting shortfalls was an under-strength condition in the Army recruiter force. The table below shows that the recruiting force was short approximately 1,000 recruiters during the summer months, the height of the recruiting season. It is difficult to quantify the precise effect of the under-strength condition, but there can be little doubt that it was substantial. The more important consideration at this point is the action being taken to correct the situation. The Army has moved to bring its number of "production (front-line)" recruiters up to full strength. All newly assigned recruiters will be operating in a fully-trained capacity by early spring 1974.

ARMY RECRUITING PERSONNEL

	January 1973	July 1973	December 1973
Total recruiter personnel:			
Authorized.....	6,658	6,636	6,510
On station.....	6,341	5,221	1 6,825
Percent.....	95	79	105
Production recruiters:			
Authorized.....	4,725	4,725	4,725
On station.....	4,446	3,752	1 5,341
Percent.....	94	79	113

1 Temporary overstrength authorized.

In November 1973, the Army also began assigning specially selected officers to take charge of recruiting areas (the geographic entities directly under the 64 recruiting main stations). These talented, high quality officers should prove an effective complement to the senior non-commissioned officers already assigned to these areas, particularly in communicating with educators, parents of prospective enlistees, and community leaders.

Unit of Choice Option

Guidance for unit-of-choice and station-of-choice recruiting, the Army's most successful recruiting option, has been revised to permit commanders to recruit against projected losses nine months into the future, assuming that every man in their unit or station will depart after 16 months. This has effectively tripled the number of vacancies for which commanders can recruit. By providing canvassers throughout the country—as was done successfully in FY 1973—it should be possible to increase the number of accessions significantly.

UNIT OF CHOICE CANVASSERS

Average number 1972.....	625
April 1973.....	485
July 1973.....	509
December 1973.....	1,034

Two-year Enlistment Option

Another step which the Army has taken to enhance recruitment is a recent modification of its two-year enlistment package. For enlistees in mental category III or higher, an option is now being offered wherein a man or woman who enlists for two years can select assignment to European duty or to a school (within a limited set of courses), but not both. It is likely that a considerable number of additional accessions will be attracted by this option who would not

otherwise enlist. However, we will be watching developments in this area very closely since there is a possibility that longer term enlistments may be adversely affected.

It should be recognized that there are practical limitations on the extent to which options of the type above can be offered :

(1) The Service must be in a position to maintain its credibility by honoring the obligations associated with such guarantees.

(2) The greater the number of option enlistees, the less flexibility there is for Army managers to assign personnel.

(3) Many highly skilled individuals take options which do not fully utilize their talents.

Combat Arms Bonus

The Army's four-year combat arms enlistment bonus remains an essential tool for meeting strength requirements of the combat arms in the all volunteer environment. It is estimated that shortfalls in the combat arms without the bonus would be on the order of 10,000 enlistments per year. This shortfall would result because the Army requires nearly half of all DoD accessions (it is presently first choice among only one-fourth of prospective enlistees), with the combat arms requirement representing 25 percent of all Army enlistments. If the same incentives were used for the combat arms as are used for the rest of the Army, only 15 percent of Army accessions would select combat arms versus the 25 percent required. The bonus goes a long way toward closing the gap, with any shortage made up by assigning selected numbers of enlistees from among those not committed under other options.

In May, 1973, the bonus policy was changed in an attempt to upgrade quality. Instead of offering a \$1500 bonus to high school and non-high school enlistees alike, the \$1500 bonus was discontinued and a \$2,500 bonus offered only to high school graduates of mental category III or higher. The costs associated with the \$2,500 amount are roughly equal to those incurred under the \$1500 program, but it is estimated that the supply of high school graduates into the combat arms has increased by about 15 percent. Although the original intent of upgrading quality is being served, the total supply of all personnel into the combat arms has decreased by about ten percent.

We are evaluating this situation to ensure that we are addressing our needs in the right priority. Changes will be made as required.

We have remained well within the budgetary limitation of the \$46.5 million for bonus payments approved by the Congress. Of the more than 400,000 persons enlisting in the military Services during FY 1973, only seven percent were enlisted for the bonus.

The effects of the four-year enlistment on turnover in the combat arms is shown in the table on the following page. During the first half of FY 1974, about 40 percent of non-prior service personnel entering the combat arms received the four-year bonus, and it is estimated that 50 percent of these would not have enlisted in the combat arms without the bonus.

The Marine Corps has less of a problem in meeting combat arms requirements since total accession requirements are less than a third of those of the Army. The bonus is not used for the Navy or Air Force.

Education and Training

A survey taken last year indicated that education and training opportunities continue to be prime incentives for enlistment. Approximately one-fourth of the enlistees surveyed indicated that they would not have enlisted without the GI Bill. About two-thirds said they were strongly influenced by opportunities for advanced education and training. Continuation of such benefits appears essential for the volunteer force effort.

Physical Standards

We are presently reviewing medical standards associated with entrance into the Armed Forces to determine if they are higher than necessary. Any adjustments in the standards will be undertaken only after the most careful analysis.

(2) *Minority Accessions.*—There has been considerable speculation that a volunteer force will primarily attract enlistees from disadvantaged socioeconomic backgrounds. Whether or not there is a higher percentage of minorities in the Services than the population at large is not a concern to us. The Department of Defense is an equal opportunity employer and is concerned solely with how well an individual performs his job, a fact well illustrated by the 26 percent black composition of the 82nd Airborne, our most combat-ready division.

EFFECT OF REDUCED TURNOVER ARMY COMBAT ARMS

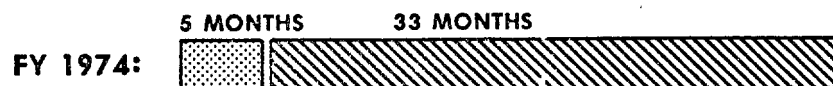
AVERAGE INITIAL TERMS OF SERVICE



TRAINING TIME



TIME ON JOB



The Gates Commission devoted considerable research to the contention that a draft-free Army would eventually become predominantly black. The Commission estimated that the proportion of black personnel in a volunteer Army would approximate 18 percent as compared to the 12.8 percent prevailing at that time (1971). After one year under the volunteer mode (through December 1973), black personnel comprise about 20 percent of total Army enlisted strength, or about 15 percent of total DoD enlisted strength.

BLACK PERSONNEL AS PERCENT OF TOTAL ENLISTED STRENGTH

	Army	Navy	Marine Corps	Air Force	DOD
Fiscal year:					
1971.....	14.3	5.4	11.4	12.3	11.4
1972.....	17.0	6.4	13.7	12.6	12.6
1973.....	18.6	7.7	16.9	13.4	14.1
1st half fiscal year 1974.....	19.9	8.1	17.7	13.8	14.9

The Department of Defense will continue to apply the same standards of trainability and adaptability to military discipline to black enlistees as we do to those other races. Those who meet our standards will be accepted. Those who do not will be rejected.

(3) *Critical Skills Shortages.*—Currently, approximately one-sixth of all physicians on active duty are serving voluntarily. Of the remainder, the majority are serving because of the recent "doctors draft", while the rest are fulfilling DoD training obligations. Since drafted physicians serve for only two years and first term retention rates are quite low, between one-third and one-fourth of the physician force turns over each year. The challenge of maintaining an adequate number of physicians while shifting from the draft to a volunteer system is a major one.

This fiscal year marks the beginning of some very real problems with respect to numbers of military physicians. Chief among the reasons for poor retention and attraction of health professionals to the military is the very substantial difference between their pay and that of their civilian counterparts. Proposed legislation now before the Congress provides for variable incentive pay ranging up to \$15,000 per year and an increase of special pay for physicians with two years of service to \$350 per month.

The Armed Forces Health Professions Scholarship Program is proving an effective tool for procuring professionals in the critically short-supply health professions. It provides annual financial assistance for some 5,000 students

pursuing graduate education in these critical areas in return for an active duty obligation of one year for each year, or fraction thereof, of program participation. A minimum obligation of two years is required by each of the military departments. Scholarships cover tuition and related costs and provide an annual income of approximately \$5,300. A total of 4,777 students have participated since the program's inception in September 1972. Of these, 511 students who entered the program in their senior year have graduated. There are currently 2,787 medical students, 1,160 dental students, and 319 other health professional students in the program.

The number of health professionals needed in the Armed Forces is presently being reappraised in an inter-agency study on military health care. This joint effort by the Department of Defense, the Department of Health, Education and Welfare, and Office of Management and Budget will assess alternative means of resolving problems related to the potential shortages of military physicians created by the end of the draft. Specifically, it will:

Assess the ability of current military medical programs to meet the future health needs of the Armed Forces;

Evaluate the existing military medical care system and alternatives to it with respect to their costs, quality of care, requirements for health care professionals and ability to meet DoD health care objectives; and,

If appropriate, recommend modifications to the military health care system that will be consistent with DoD missions and objectives, be compatible with civilian health care needs, and minimize the overall costs of military medical care.

The problems of attraction and retention in the critical skills area are by no means limited to physicians. They extend to all skills which command a premium wage on the open market. Continued excessive turnover of expensively trained specialists lowers the effectiveness of our military units and imposes heavy repetitive training costs.

To cope with this problem, authority is needed to pay enlistment and reenlistment bonuses on a cost effective basis in selected short-supply occupations in return for a commitment to serve for a stipulated number of years. Such bonuses can be viewed as a prepaid wage differential based on the qualifications of the individual and the unique needs of the Services.

Legislation has been proposed which provides for expanding enlistment and reenlistment bonus authority. Under existing law, enlistment bonus authority is restricted to individuals enlisting for at least three years in specified combat elements of the Army and Marine Corps. A more flexible application of the enlistment bonus as has been requested would increase enlistment of critical skills personnel in the Army alone by between 10,000 and 12,000 per year—and obtain more than one extra year of time on the job per enlistment. This would in turn reduce training costs, thereby offsetting the cost of the bonuses. It is estimated that by offering an enlistment bonus within the \$3,000 limitation, the Services would meet their requirements in the following critical skills and avoid substantial costs for each bonus enlistee:

Skill	Training cost	Training savings per bonus accession ¹
Army light air defense electronic repairman.....	\$20,000	\$12,100
Marine Corps ground radar repairman.....	8,500	3,700
Hawk fire control repairman.....	45,000	27,700
Weapons system radar repairman.....	19,300	16,900

¹ Does not include subtraction of bonus payment.

When shortages in a particular skill develop, alternative management actions will be pursued prior to employing the bonus. Whenever a bonus is applied, it will be done in the most cost effective manner possible.

Current law provides for a Regular Reenlistment Bonus which is paid to all reenlistees without regard to specialty. As a result, 25 percent of these payments are made in skill areas where sufficient retention can be achieved without a bonus. This translated to more than \$43 million in both FY 1972 and FY 1973 in unnecessary payments.

Current law also provides for a Variable Reenlistment Bonus which is paid only to reenlistments in critical skills and only for the first reenlistment. This

fails to address retention problems for certain critical skill shortages at the second reenlistment point.

The Selective Reenlistment Bonus we have proposed would provide the flexibility of applying the incentive after 21 months of a member's initial ten years of service. The amount paid would depend on the severity of the retention problem in a particular skill. Members who reenlist in a skill where no shortage exists would no longer receive a bonus. While additional costs of about \$4 million would be incurred in each of the first two full conversion years (FY 1975 and FY 1976), annual savings would be up to \$77 million by the fifth full year of operation. Enactment of this proposed bonus would enable us to spend our retention funds more effectively and to reduce substantially our future costs.

(4) *Women in the Services.*—Today there are more than 60,000 women serving in military uniform. This is consistent with our longer-term goal of having approximately 130,000 women in uniform by FY 1978. The following table depicts future year targets for each Service.

DOD PLANNED END STRENGTH FOR WOMEN, FISCAL YEARS 1975 TO 1978

[In thousands]

	Fiscal year—			
	1975	1976	1977	1978
Army:				
Enlisted.....	34.4	40.4	43.8	47.3
Officer.....	4.6	4.8	5.0	5.4
Total.....	39.0	45.2	48.8	52.1
Navy:				
Enlisted.....	17.2	20.2	20.4	20.5
Officer.....	3.9	4.1	4.3	4.3
Total.....	21.1	24.3	24.7	24.8
Marine Corps:				
Enlisted.....	2.3	2.5	2.7	2.7
Officer.....	.4	.4	.4	.4
Total.....	2.7	2.9	3.1	3.1
Air Force:				
Enlisted.....	25.4	31.2	37.3	43.5
Officer.....	5.3	5.6	6.0	6.6
Total.....	30.7	36.8	43.3	50.1
DOD:				
Enlisted.....	79.3	94.3	104.2	114.0
Officer.....	14.2	14.9	15.7	16.7
Total.....	93.5	109.2	119.9	130.7

Note: Totals may not add due to rounding.

In FY 1973, 20,800 women enlisted in the four Services. The FY 1974 goal calls for enlisting more than 30,000 women—an increase of almost 50 percent. We are confident this goal will be met. All career fields are now open to women except for certain combat and direct combat-support positions denied them by law or regulation.

The average term of service for female enlisted personnel has increased from 2.44 years as of June 30, 1972, to 2.70 years as of June 30, 1973. This lower turnover will act to reduce both turbulence and training costs.

(5) *Civilianization.*—As we move toward an All-Volunteer Force, we have been reexamining our "mix" of military/civilian personnel to determine the extent to which increased civilianization can reduce the requirement for military personnel and, collaterally, personnel costs. The policies governing the use of military and civilian personnel have remained substantially unchanged for more than 20 years. Simply stated, they provide for the use of civilian personnel in jobs which do not require military incumbents. The more obvious constraints on how far we can proceed in this direction are the effect on combat capability and on the military rotation base.

Our present intentions are to push civilianization as far as we possibly can within the limitations of the above constraints. We are presently engaged in

civilianizing some 31,000 military positions, to be completed by June 30, 1974. An additional 6,600 military positions, representing the "support tail" for the 31,000 are also being eliminated. The military spaces for these jobs were deleted in last year's budget. In FY 1975, more than 8,500 military jobs will be civilianized along with an associated 1,250 position "support tail".

2. *Reserve Forces.* Under the Total Force policy, the Selected Reserve of the National Guard and Reserve provides approximately 30 percent of the manpower immediately available for national security in any future emergency. The economies of the Guard and Reserve in relation to the cost of like active force units are real economies only to the extent that the Guard and Reserve can produce levels of readiness commensurate with Total Force needs and can respond within a timeframe which makes their contribution meaningful.

In the Air National Guard, the Air Force Reserve and in selected units of other components, training and mobilization planning have progressed to the point where responsive readiness is being attained. In others, further efforts have to be made to improve training and shorten response time. While significant improvements in readiness potential have been achieved through providing additional and newer equipment, much remains to be done to ensure adequate pre-mobilization readiness.

The economies of the Guard and Reserve also depend to a large extent on the relationship of the force structure of these components to the actual needs of the active forces for emergency augmentation. In this regard, some restructuring of Guard and Reserve units has been effected. The Army has converted all Guard and Reserve units to standard active Army tables of organization and equipment. The Navy has restructured its aviation program to provide equipped and deployable force units rather than flight training programs for replacement personnel. The Air Force has eliminated certain medical and postal units for which there was no immediate need and has converted a portion of its units to the associate concept which provides for full mobilization utilization of selected active Air Force transport aircraft. These examples represent a positive first step in the direction of what the total Force must provide. We intend to accelerate the effort to relate every unit and every individual in the Selected Reserve to a specific priority mobilization mission. The Military Manpower Requirements Report for FY 1975 will provide details relating Guard and Reserve manning levels to present force structure.

While the initial emphasis of the Total Force policy was to increase the readiness and capability of forces in being, priority is now being given to a review of mission assignments, force structure, and training concepts. With this review in progress, efforts to improve manning, equipping, and training will continue to go forward. These efforts will be particularly directed toward improving the readiness of those units which have demonstrated their ability to meet manning objectives and to meld newly available equipment with manpower resources into an effective mobilization force.

(a) *Manning the Guard and Reserve.*—With the exception of the Air National Guard, reserve components have not been able to recoup fully the sudden losses in Selected Reserve strength which occurred with the temporary expiration of induction authority during the summer of 1971 (the present trend in Army National Guard recruitment, however, is quite favorable). The following chart shows Selected Reserve manning as of December 31, 1973, and compares it to the combined officer and enlisted strengths that existed when the general losses began.

SELECTED RESERVE STRENGTHS

	ARNG	USAR	USNR	USMCR	ANG	USAFR
DEC. 31, 1973						
Officer.....	34,648	37,721	18,299	2,753	11,658	10,435
Enlisted.....	1,357,813	1,189,517	100,814	30,371	80,813	35,776
Aggregate.....	1,392,461	1,227,238	119,113	33,124	92,471	46,211
JUNE 30, 1971						
Aggregate.....	402,175	263,299	130,041	47,006	85,689	50,180
Net change.....	-9,714	-36,061	-10,923	-13,882	+6,782	-3,969

¹ December figures do not include 6,282 non-prior-service enlistees awaiting training in ARNG nor 1,249 in the USAR.

While officer strength has remained high, non-prior service enlisted accessions in all DOD reserve components for the first six months of FY 1974 were 17,802 against a program objective of 53,224 for the same period. Improvements in recruiting, however, have begun to reverse the downward trend, producing net gains in strength since the beginning of FY 1974 in three of the six Guard and Reserve components. Volunteer enlistments in the first two quarters of FY 1974, have been almost twice those of the same quarters of FY 1973.

Prior service accessions have generally been better than expected (73,170) compared to the December 31, 1973, objective of 51,679) and significant improvement has taken place in the retention of first term members of both the Guard and Reserve. For example, the Army National Guard, which had a first term reenlistment rate of 13 percent in FY 1972, increased that rate to 21 percent for the first quarter of FY 1974 and Naval Reserve rates which were 15 percent in FY 1972, increased to 40 percent during the same quarter.

Today's personnel shortages in the Guard and Reserve stem from two basic causes. The first cause was the expiration of induction authority. The second was the associated absence of recruiting personnel and expertise—understandable when one considers that commanders and administrators had been accustomed to processing draft-motivated enlistment applications on a waiting-list basis, rather than actively seeking new members. A major effort has been made to improve Guard and Reserve recruiting capability. Total Guard and Reserve budgets for recruiting and recruiting advertising have been increased from \$18.9 million in FY 1972 to \$71.6 million in FY 1974, with much of the increase being applied to the assignment and training of recruiters.

While increased effort and recruiting capability have been the most apparent contributors to the slowing of loss rates, other Total Force initiatives are also having an effect. The basic concept of a Total Force has in itself provided a new sense of purpose. Guardsmen and Reservists now see growing evidence that they *will* be called and have a role to play in future emergencies. Equipment modernization is seen to symbolize genuine interest in Guard and Reserve readiness. Supply priorities have been revised to reflect missions and deployment schedules and no longer differentiate between active force and Reserve component elements. These improvements in equipping coupled with improved facilities and increased involvement with the Active Forces in joint training exercises are enhancing motivation which should augur well for retention of current personnel. Under new "round out" concepts, Army Guard and Reserve units of various sizes are added to active Army units at the next higher command level to increase the capability of the active units. Where such assignments have been made, the close integration of the Army Guard or Reserve unit into its parent organization has resulted in better readiness and increased enthusiasm among unit members.

Since these initiatives and improvements in training do more to increase retention of those currently in the program than they do to attract new members, ways must be found to increase accessions of non-prior service enlisted personnel. With an eye toward retaining to the maximum extent possible present cost differentials between Reserve and Active forces (annual pay for Guardsmen and Reservists runs about one-sixth of that received by their active force counterparts), improvements have been sought which are most likely to yield maximum results at minimum cost: relaxation of limitations on purchases in military exchanges for members of the Selected Reserve, extension of full time coverage under Servicemen's Group Life Insurance, provision of equitable benefits for Guardsmen and Reservists who are injured or killed while on active duty for less than 30 days or while traveling to and from training, and permission for retired active force enlisted personnel to participate in the Selected Reserve without loss of their retired pay.

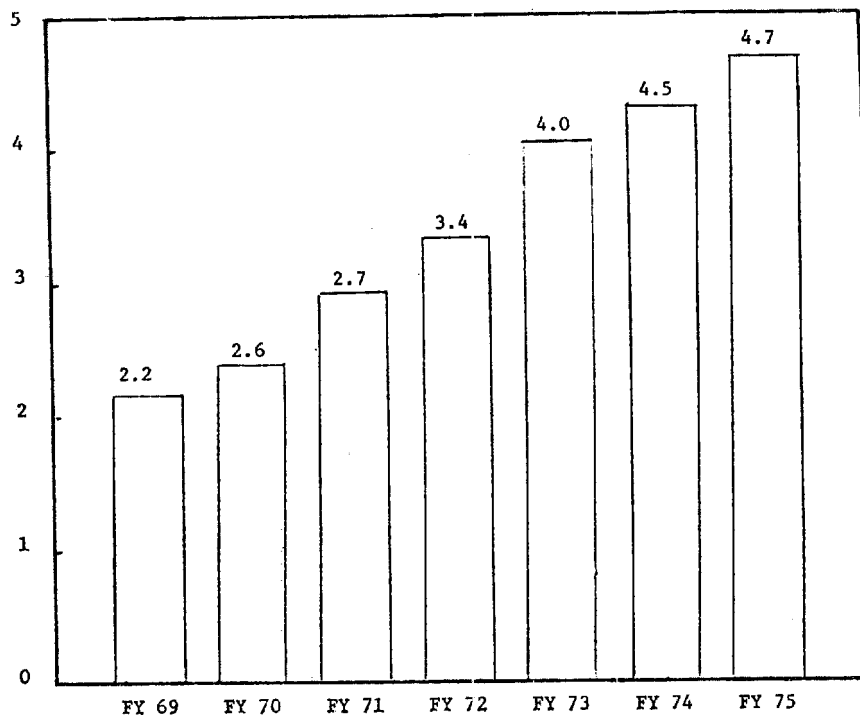
In addition to those legislative proposals which have already been submitted, additional actions which might assist in improving Reserve recruitment are being considered. Two of these measures concern retirement. The first involves a revision in the Reserve retirement system (compatible with the new system proposed for the active forces) which would provide additional retirement options to the Reserve member and improve the protection available for his family should he die before reaching age 60. The second measure would raise the current limit on inactive duty training credit for retirement purposes so that those individuals who are required to perform extra training to improve unit readiness would be able to include this training in the computation of their retired

pay. A great deal of effort is going into developing these proposals in such a manner that they remain in the low cost category of incentives.

Another proposal under consideration which has substantial support within the Guard and Reserve community would entail limited tuition assistance during membership in the Selected Reserve. We are also investigating the degree to which application of improved training methods and advanced training technology can reduce the time required for initial active duty training. Reducing the time of required absence from civilian life to a period more compatible with normal civilian vacation schedules could be a great help in attracting high school graduates who have the summer free before they begin college or whose civilian jobs are programmed to start in the fall of the year. If it is determined that the time can be reduced without impairing training, we will propose a revision to the appropriate law.

Costs.—Funds budgeted for support of the Guard and Reserve have risen steadily over the past several years to their present level of \$4.5 billion. They will increase to \$4.7 billion for FY 1975. Personnel costs presently constitute approximately 41 percent of the total with the balance made up for the most part by items designed to improve operational readiness—higher levels of operational training, better training sites, more maintenance facilities and improved capability for maintaining modern equipment.

RESERVE COMPONENT BUDGET
(Dollars in Billions)



(b) *The future of the Guard and Reserve in the Total Force.*—As mentioned previously a major and comprehensive study has been initiated to examine all aspects of the Guard and Reserve role in the Total Force picture and to recommend actions which will ensure future Total Force effectiveness. This study is placing a major emphasis on availability, force mix, limitations, and the potential of the Selected Reserve for use in future emergencies. It will also respond

to the Congressional Amendment to the Armed Services Procurement and Authorization Act which calls for assessing the Air National Guard and Air Force Reserve readiness and management effectiveness and the potential for merger of the two organizations.

In view of the broad scope and sweeping nature of this study, the Guard and Reserve structure which subsequently emerges may be considerably different in many respects from the present structure. The end product should be a Total Force comprising the active Armed Forces and those units of the Selected Reserve which are essential to meeting initial military contingency requirements and which can be further augmented through mobilization of additional Reserve elements.

B. MANPOWER UTILIZATION

In this time of high personnel costs it is more imperative than ever that we utilize our people in the most effective manner possible. Toward this end, we are taking a hard look at how we might enhance our overall combat capability. We are also realigning domestic and overseas base support structures to keep them consistent with projected force levels and requirements.

By the same token, we seek the beneficial effects of inter-Service competition while avoiding the non-beneficial. The notion that each of the Services should be independent of the others so that it doesn't have to rely, as it were, on external sources of support is outdated. We can no longer afford it. We have to now think in terms of Total Force structure as opposed to separate interests. Consolidation of certain aspects of the Service training efforts represents a step in this direction.

1. *Headquarters Reductions.*—During our military involvement in Southeast Asia, substantial augmentation of a number of headquarters establishments was necessary to cope with attendant problems of command and control, logistics, and administration of forces totaling more than four million military and civilian personnel. Over the past four years, we have been phasing down these headquarters functions. Between FY 1971 and FY 1973, headquarters manpower was cut 16 percent, more than 20,000 military and civilian jobs.

Although substantial reductions have been made, I am persuaded that further economies are possible. We are presently studying ways to make further cuts in our headquarters establishments without adversely impacting combat force effectiveness. I am pleased to report that a good start has been made. The President's FY 1975 budget calls for a reduction of almost 9,000 headquarters jobs by June 30, 1975, from the FY 1974 estimates included in last year's Presidential budget. In addition, some 7,000 headquarters positions and functions are being transferred to field activities to improve efficiency and standardize headquarters functions. I expect to achieve further substantial reductions after the present review is completed and to use these savings to improve combat capability.

2. *Base Closures.*—The base realignment announcement of April 1973, is affecting Defense installations and activities in 32 States, the District of Columbia, and Puerto Rico, and is resulting in the elimination or reassignment of approximately 42,800 positions (26,200 civilian and 16,600 military). Attendant with this realignment, 28 communities have thus far asked for Federal assistance. Through the end of December 1973, the President's Economic Adjustment Committee has seen to it that these communities have received \$2.4 million in technical assistance funding, \$6.7 million in manpower retraining funds, and \$1.5 million in other Federal program resources related to the conversion effort. More important, the President's Committee has helped each of these communities formulate a recovery strategy. This kind of assistance—designed to help communities help themselves—will continue until each has overcome the economic impact of realignment actions.

At this time, exceedingly few civilian personnel have had to be laid off without a job opportunity. A good example is the case of the Hunters Point Naval Shipyard in San Francisco where virtually all of the approximately 4,000 workers who have been displaced to date have been provided suitable alternatives.

Additional realignments of military installations both at home and abroad are presently under consideration. As a part of this program, we have recently ordered changes affecting 59 overseas activities/installations which in turn will affect approximately 4,000 personnel and result in an annual savings of about \$35 million.

3. *Training.*—While individual training is a fundamental prerequisite to combat readiness, it is also expensive, making very high demands on scarce resources.

In monetary terms, individual training costs in excess of \$6 billion each year. In manpower terms, about one-sixth of all military personnel—students and trainees, instructors and support personnel—are engaged in the training mission and therefore unavailable for duty in operational units. The following table shows the general trend over the past decade.

TRAINING PERSONNEL

	Fiscal year—						
	1964	1968	1971	1972	1973	1974 (estimate)	1975 (estimate)
Individual training personnel (military end-strength, thousands)	403	700	507	405	354	364	341
Training personnel (as percentage of total strength)	15.0	19.8	19.9	17.5	15.6	16.6	15.8

A high proportion of individual training, notably recruit training and initial specialized skill training, is a function of the number of new entrants into the Services. This, in turn, is sensitive to such factors as term of enlistment and loss rates. As the table shows, training personnel consumed almost 20 percent of total military strength in FY 1968, when two-year inductees formed a high percentage of new entrants. Although the present trend is down, we are trying to further reduce the resources devoted to individual training by all means consistent with maintaining a skilled and combat-ready force. One approach we are pursuing is that of tailoring the training to the real rather than theoretical demands of a specialty. As an example of the kind of savings obtainable from this approach, we have achieved an annual savings of more than \$2 million in the training of electronic and cryptographic equipment repairmen alone.

We are also emphasizing joint training, consolidating as many single-Service courses as practical into joint courses. An inter-Service Training Review Board has been formed which in its first months of operation identified 37 training courses which were subsequently consolidated into 18 joint courses. This resulted in an annual recurring savings of \$480,000. Other courses with large enrollments are currently under review for possible consolidation.

Another approach we are pursuing is that of applying advanced technology to the training mission itself. For instance, we have undertaken a major program to expand the use of simulators in flight training. The long-term objective of this program is to substantially reduce flying hours consumed in flight training which in turn will generate savings in both aircraft maintenance and fuel consumption.

There are other ways of conserving training resources without loss of effectiveness which we are pursuing—lateral entry (enlisting skilled personnel at pay grades commensurate with their training and experience); better use of trained personnel; use of on-the-job training in appropriate skills; and better management of training support and overhead, to mention only a few.

C. MANPOWER REQUIREMENTS

Manpower requirements result from the force levels described earlier in this report. The force levels themselves are derived from the national strategy designed to cope with a specified level of threat. Recommended military manpower strengths for FY 1975 are shown in the table on the following page. These recommended strengths will be explored in considerable depth in the forthcoming FY 1975 DoD Manpower Requirements Report to the Congress.

We strive for precise determinations of requirements in all areas of manning for all situations. The Services develop their respective manpower requirements through the use of planning factors, industrial engineering techniques, computer simulation and the like. We have high confidence in the requirements calculations, particularly with respect to strategic and general purpose forces. Some areas, of course, are more difficult to quantify than others since their requirements may be relatively independent of total force size. For example, such matters as how many intelligence officers should be assigned any given unit are more a function of the threat to be assessed than they are the size of the unit involved. The same sort of consideration holds true for research and development manpower where requirements relate primarily to technology and to the weapons developments of potential adversaries.

This uncertainty in programming the optimum level of requirements in some support functions stems from the difficulty in relating support levels directly to force effectiveness. Through various studies presently in progress, we are attempting to better define, and analytically quantify where possible, the relationships between support resource inputs and force effectiveness outputs.

MILITARY MANPOWER REQUIREMENTS

[Active duty end strengths in thousands]

	Fiscal year—		
	1973 actual	1974 estimated	1975 estimated
Strategic forces.....	124	123	115
General purposes forces.....	909	901	929
Land forces.....	512	513	537
Tactical air forces.....	165	169	169
Naval forces.....	190	178	176
Mobility forces.....	43	41	47
Auxiliary forces.....	162	156	139
Intelligence and security.....	63	56	48
Communications.....	47	49	40
Research and development.....	35	33	34
Support to other nations.....	4	5	5
Geophysical activities.....	14	13	13
Mission support forces.....	342	309	311
Reserve component support.....	14	15	14
Base operating support.....	239	208	212
Crew and unit training.....	36	35	35
Command.....	52	51	49
Central support forces.....	389	358	346
Base operating support.....	47	42	42
Medical support.....	92	83	82
Personnel support.....	32	31	31
Individual training.....	151	140	131
Command.....	44	38	37
Logistics.....	21	21	20
Federal agency support.....	3	4	4
Individuals.....	326	327	312
Transients.....	106	90	88
Patients and prisoners.....	12	10	10
Trainees and students.....	197	215	201
Cadets.....	10	12	12
Total DOD.....	2,252	2,174	2,152

Note: Totals may not add due to rounding.

Another relatively imprecise aspect of determining manpower requirements is that of forecasting future needs. Our stated requirements at any given time are those we believe to be essential in light of our assessment of security needs and of the need to allocate available resources between competing demands such as research and development and weapons procurement. As we get closer to plan execution, we refine our estimates to conform more closely to the realities of what is a continually changing situation. This is, of course, the same process used by any major industrial firm.

Other complicating factors also have to be taken into consideration. In a no-draft environment, for instance, the seasonality of volunteer accessions and the retention rates of those already in the forces will affect actual strengths at any point in time. Another example of such factors is the impact of inflation on funds for military personnel appropriations as the year progresses. If Permanent Change of Station move costs or food prices increase more than expected, the military personnel program may have to be adjusted in other areas to stay within the total funds available. This adjustment in the personnel program may take the form of forced losses (early-outs) or reduced accessions, either of which may affect on-board strength at the end of the year.

The point to be made, in short, is that there are fundamental uncertainties involved in manpower planning. In spite of the increase in such uncertainties that emanates from an "all volunteer" environment, we are sizing our military forces on the assumption that we will meet whatever recruiting goals are needed. In fact, we have programmed an increase in Army strength for FY 1975—a move which I think demonstrates our confidence in being able to meet or stay close to requirements.

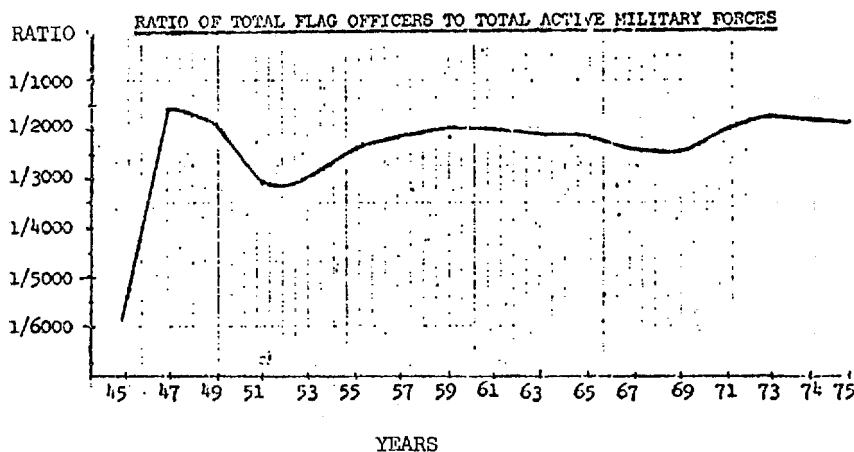
D. PERSONNEL POLICIES

While it is important that we seek to improve utilization of manpower, it is equally important that we do so in the most equitable manner possible. In this regard, nothing impacts so much on morale as the policies we employ in managing our personnel. The potential impact of every action we take in this area must be carefully weighed in advance to ensure the fairest possible treatment for everyone.

We are attempting to apply this standard in those initiatives presently underway: realignment of the military and civilian grade structures, modernization of the military retirement system, and restructuring of the military compensation system.

1. *Grade Structure.*—We are examining very closely the present grade structure to ensure that it is no richer than that required to meet the combined needs of readiness and personnel management.

The status of flag and general officers has recently been the subject of a great deal of scrutiny by individual members and working committees of the Congress. Invariably it is noted that the number of flag/general officers on active duty today is proportionately higher with a 2-million strength military establishment than it was with a 12-million strong establishment in 1945.



The change that has taken place over the past three decades has largely evolved from significant functional and organizational changes. The Defense Reorganization Act of 1958; the establishment of the Department of Defense, a separate Air Force, and the Joint and combined staffs and commands; the Defense research and development effort; and the sophistication of weapons and support systems have all contributed to additional flag officer requirements within the Defense establishment. Although these requirements would suggest the need for more rather than fewer senior officers, the Department of Defense has remained within its authorizations established either by statute or as limited administratively by the Senate Armed Services Committee. In addition, as we complete the post Vietnam adjustments in our force posture, our Fiscal 1975 program calls for reducing the active duty strength of our top military managers from 1,352 to 1,231, the lowest flag officer level since 1954.

With respect to the remainder of the officer corps, the Services are confronted with the difficult task of scaling down a relatively large career force which has been maintained since 1951; a task made all the more difficult by the substantial

expansion required for the Vietnam war. Time and a period of stability are necessary to achieve a balance of age, experience, and rank in the smaller forces programmed for the future if we are to avoid unnecessarily harsh and debilitating actions against our career people.

Table 1 below demonstrates the dynamic changes that have occurred in the military personnel structure over the past decade. By the end of FY 1975, the officer force will have been reduced by 124,000, nearly one-third since the Vietnam peak. Table 2 shows a representative sampling of the commissioned officer grade distribution over the same period of time as compared to the programmed levels for FY 1975. The comparison shows that since the peak Vietnam strength was reached in 1969, the Services have been controlling and managing their structures downward.

During FY 1975 one out of every two military positions eliminated will be an officer. While large numbers of junior officers (many of whom were brought to active duty during the war years) have been released, the release of senior officers has presented some problems—for two basic reasons. First, reductions in force do not generally produce proportionate reductions in senior officers, primarily because there are fixed organizational and management functions which are not eliminated or significantly reduced when forces are reduced. A second and perhaps equally significant reason is that of tenure afforded by law. A regular officer may not be involuntarily retired before his mandatory length-of-service retirement date except under punitive conditions or by reason of physical disability or unsatisfactory performance of duty. Thus, existing procedures provide for the separation of certain officers, but they do not permit the early involuntary retirement of officers who are excess to the needs of the Services in times of force reductions.

TABLE 1.—DEPARTMENT OF DEFENSE, TOTAL OFFICER AND ENLISTED STRENGTHS
[In thousands]

	Fiscal year—				
	1964	1969	1973	1974	1975
Officers ¹	337	419	321	305	295
Enlisted.....	2,349	3,041	1,932	1,870	1,858
Total.....	2,686	3,460	2,253	2,175	2,153

¹ Includes warrant officers.

TABLE 2.—DEPARTMENT OF DEFENSE, COMMISSIONED OFFICER GRADE DISTRIBUTION

Commissioned officers	Fiscal year—					Change since 1969	
	1964	1969	1973	1974	1975	Number	Percent
Generals/admirals.....	1,294	1,336	1,291	1,248	1,231	-105	-7.9
Colonels/captains.....	15,323	18,277	16,231	15,911	15,734	-2,543	-13.9
Lieutenant colonels/commanders.....	36,347	43,999	36,454	34,839	33,646	-10,353	-23.5
Majors/lieutenant commanders.....	55,081	73,645	59,801	56,887	55,427	-18,218	-24.7
Captains/lieutenants and below.....	213,085	251,147	186,481	176,470	170,634	-80,513	-32.1
Total.....	321,130	388,404	300,258	285,355	276,672	-111,732	-28.8

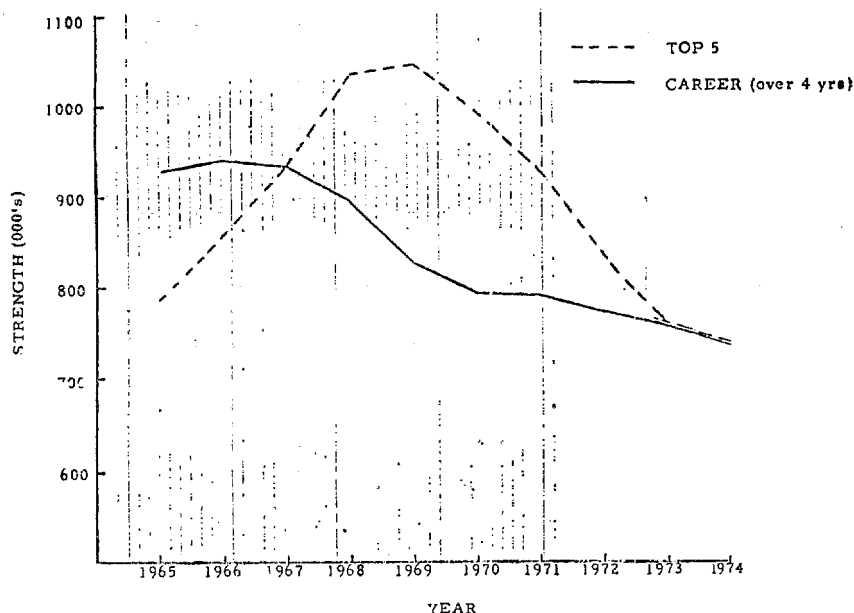
To address this problem, we have proposed legislation that would authorize the Service Secretaries to involuntarily retire certain regular officers serving in the grades of Lieutenant Colonel/Commander and Colonel/Captain. It is a necessary piece of legislation if we are to respond to demands that grade structure balance be maintained during periods of force reductions.

This proposal represents an advance portion of an even more extensive legislative package recently forwarded to the Congress, the purpose of which is to implement the recommendations of the Report on Officer Grade Limitations submitted to the Congress in May 1973. The new grade limitations recommended in this report for Colonel/Captain through Major/Lieutenant Commander are designed to enable us to meet our officer requirements on a long term basis while

providing adequate career opportunity for attracting and retaining young officers. This proposed legislation would provide new tools essential to more effective management of the officer force, provide adequate career opportunity, and unify what have heretofore been disparate rules among the Services. In this connection, it should be noted that the Air Force is currently provided comparability in career progression with other Services through temporary grade authority which expires September 30, 1974. If the proposed legislation discussed above is not enacted during the 93rd Congress, it will be necessary for us to take separate action to extend the temporary grade authority for the Air Force.

On the enlisted side, there are nine different pay grades, the top five of which (E-5 through E-9) include "sergeants" varying in title from "buck" sergeant to sergeant major. Many are NCOs, but many others are skilled technicians and specialists who operate and maintain complex equipment. At the end of FY 1974, we expect to have about 251,000 NCOs and technicians in these five pay grades in the Army. The bottom four enlisted grades include recruits, privates, privates first-class, and specialists/corporals. Recruits and privates, will total about 252,000 at the end of this fiscal year and specialists/corporals about 176,000. Thus 37 percent of the enlisted force occupy the top five grades with the remaining 63 percent in the lower four grades. In other words, there are about 1.7 times as many in the bottom group as in the top.

DOD CAREER FORCE VS TOP 5 GRADES
1965 - 1974



As can be seen in the table on the following page, the numbers of enlisted personnel in the top five grades for all Services have been continuously decreasing since FY 1969, when over one million held the highest ranks. Some 20 percent of this group consisted of personnel in their first four years of service who were advanced to the higher grades to meet Defense needs. By reducing the number in the top five grades and establishing minimum time-in-service criteria for promotion, fewer personnel are now attaining the grades of E-5 and up during their first four years of service. This results in a better correlation of experience with grade levels and a more equitable relationship between experience and compensation. Since less than four percent of the enlisted force had more than 20 years'

service at the end of FY 1973, the present decline in the number of careerists can only be accelerated through forced attrition. Forcing large numbers of personnel out of the service short of retirement without severance pay would severely deplete the experience level of the force (until such time as it could be systematically restructured), adversely affect retention, and require higher procurement of inexperienced volunteers. In summary, it is our intention that the downward trend in numbers of careerists and those in the top five grades will continue at a manageable rate—in keeping with the principles of sound personnel management.

2. *Retirement.*—In March 1971, the President appointed an Interagency Committee to review the military retirement and survivor benefit system and to recommend changes as deemed necessary. In January 1972, a DoD Retirement Study Group was formed to review the recommendations of the Interagency Committee. The Study Group's recommendations, which provide the basis of our proposal presently before Congress for changing the non-disability retirement system, treat retirement as one of a number of interrelated elements of the compensation system (basic pay, survivor benefits, bonuses, special pay, and the like).

The compensation system itself has changed over recent years as active duty pay and allowances have increased substantially. In the past, a highly liberal retirement system could be justified in terms of off-setting the low pay received by an individual while on active duty. Since direct compensation has increased so dramatically, it has been appropriate to reappraise the retirement system.

The DoD Retirement Study Group noted several defects in the present retirement system: no retirement benefits are vested in the individual before serving 20 years; retirement annuities are based on terminal pay; appropriate separation payments are not available; the annuity formula does not provide a sufficient retention incentive beyond 20 years of service; and the system itself is generally ineffective as a personnel management tool.

With respect to cost, \$2.4 billion were allocated to retirement in FY 1969; in FY 1973, the cost rose to \$4.4 billion; and in FY 1974, with no change to the retirement system, \$5.2 billion would be required. The projected growth in retirees and retired pay costs is going to place this element of compensation in increasing competition with other requirements for scarce DoD resources. The Uniformed Services Retirement Modernization Act (H.R. 12505) addresses this aspect and attempts to rectify other shortcomings of the present system. A comparison of the long-term cost implications of the present and proposed systems is shown in the table below.

When all parts of compensation are considered, individuals who retire under the new retirement system will receive substantially more overall compensation throughout their service career and retirement than members who retired before these changes occurred. Notwithstanding these larger considerations, however, the proposed retirement system will still be a liberal, progressive system when compared to most plans presently offered in the nonmilitary sector.

A review of the standards and criteria for disability retirement showed that the laws governing such retirement were sound, but that the standards used in determining physical "unfitness" for military service were unrealistic. Accordingly, on January 29, 1973, new guidelines were issued which require that a finding of physical "unfitness" for purposes of disability retirement be a factual finding that a member is unfit to perform the duties of his office, rank, grade or rating.

The number of disability versus non-disability retirements during the period March through September 1973, has decreased considerably when compared to the same period in 1972 (see second table).

3. *Compensation.*—All compensation changes are addressed to two problems: (1) manpower shortages resulting from a zero-draft environment, and (2) inefficiencies in the military compensation structure which result in excessive personnel costs. Most compensation changes address both of these problems, but with varying degrees of emphasis.

(a) *Flight Pay.*—The existing system of flight pay was developed in 1948, and later adjusted in 1955. While this system has in the past assured sufficient volunteers for aviation it has been generally ineffective in retaining a sufficient portion of trained aviators beyond their initial obligation. A principal reason for this has been the way in which flight pay incentives are structured. The highest rates are awarded to senior officers of over 18 years of service, while junior

officers at their retention decision point and most flying-intensive years are offered relatively modest incentive rates. The inadequate retention resulting from this system has resulted in substantial training costs.

RETIREMENT COST PROJECTIONS, PRESENT AND PROPOSED SYSTEMS

[Dollars in billions]

Fiscal year	Present system			Proposed system (Retirement Modernization Act—RMA)			Cumulative ¹ difference for all intervening years
	Retired pay of past retirees (persons retired before fiscal year 1975)	Retired pay of future retirees (persons retired in fiscal year 1975 and later)	Total retired pay	Retired pay of past retirees (persons retired before fiscal year 1975)	Retired pay of future retirees (persons retired in fiscal year 1975 and later)	Total retired pay	
1976	\$5.4	\$0.7	\$6.1	\$5.4	\$0.8	\$6.2	+\$0.1
1980	5.3	2.6	7.9	5.3	2.5	7.8	0
1990	4.8	8.1	12.9	4.8	7.6	12.4	—2.9
2000	3.4	15.6	19.0	3.4	14.6	18.0	—12.1

¹ Difference includes all years starting with fiscal year 1975, not just those years shown.

Assumptions: (1) RMA is implemented effective July 1, 1974. (2) Force size is fixed at 2,140,000. (3) Base pay increases 5 percent per year and CPI increases 1.5 percent per year. (4) All involuntary separations choose lump sum equity pay rather than deferred annuity. (5) Readjustment pay is not included in RMA total. It would reduce total cumulative year 2000 from \$12,100,000,000 to \$10,500,000,000.

MILITARY RETIREMENTS

COMPARING 1ST 7 FULL MONTHS UNDER NEW GUIDELINES WITH SAME PERIOD 1 YEAR EARLIER (MARCH–SEPTEMBER)

Grade	1972 retirements			1973 retirements		
	Total	Disability	Percent with disability	Total	Disability	Percent with disability
O7–O10	169	77	45.6	183	14	7.7
O6	2,676	525	19.6	2,288	151	6.6
O4–O5	5,377	566	10.5	4,981	263	5.3
O1–O3	743	359	48.3	462	187	40.5
Warrant officers	813	105	12.9	1,110	67	6.0
Total officers	9,778	1,632	16.7	9,024	682	7.6
E7–E9	19,385	2,107	10.9	22,578	901	4.0
E4–E6	18,494	3,728	20.2	16,013	1,841	11.5
E1–E3	1,418	1,020	71.9	1,285	939	73.1
Total enlisted men	39,297	6,855	17.4	39,876	3,681	9.2
All personnel	49,075	8,487	17.3	48,900	4,363	8.9

Legislation presently before the Congress (H.R. 8593) provides for restructuring the flight pay system. If enacted, it would increase the incentive for younger aviators at their retention decision point. The current FY 1974 officer flight pay budget is \$213 million. The estimated cost of the proposed system is \$211.8 million. Since it costs us approximately \$300,000 to train a new pilot (exclusive of certain fixed costs), it is anticipated that considerable additional savings will also accrue from improved retention.

(b) *Military Pay Adjustment System.* The current military pay adjustment system is linked to that of Federal classified employees. However, the uniformed services operate under a pay and allowances system rather than a salary system, and current law requires that all upward pay adjustments be placed into basic pay with nothing going into allowances. This practice coupled with periodic noncomparability related increases in allowances serves to distort the entire comparability process and greatly increases the cost of military compensation items dependent on basic pay for their computation—most notably retirement pay.

To correct this imbalance, we have proposed legislation (H.R. 10370) that would provide for the allocation of a portion of future comparability pay increases into quarters and subsistence allowances. Such a system would increase allowances to more meaningful levels, reduce the size of basic pay increases, lower the costs of retirement and other basic pay related compensation items, and make the military compensation system for active duty personnel more nearly comparable to that of Federal classified employees (the intent of current law). It is estimated that savings of more than one billion dollars would accrue by the fifth year of operation when contrasting the effect of the new system with what would otherwise occur under existing comparability law.

4. *Civilian Employment.*—The greatest problems confronting us in this area are the simultaneous and contradictory demands from the Congress to effect further reductions in civilian employment while simultaneously civilianizing additional military positions.

(a) *Grade Levels.* As with other Federal agencies, the Department of Defense has over the long-term experienced a persistent rise in the average grade of civilian positions. In August 1971, a program was implemented to reverse the trend with encouraging results:

GENERAL SCHEDULE (AVERAGE GRADE)

	DOD	Decrease from 1971	Federal average	Increase from 1971
1971.....	7.81		7.82	
1972.....	7.73	-0.08	7.96	+0.04
1973.....	7.66	-.15	7.95	+.03

While anticipated civilian work force reductions in the Department of Defense will tend to raise the average grade, more liberal retirement benefits will tend to offset this effect. However, true civilian personnel cost reductions will only be achieved through management practices that keep positions and organizational structures in line with actual work requirements. Through our ongoing program of position review and evaluation we will continue to pursue our goal of improving manpower utilization.

b. *Selective Retirement.* While we are concerned about making improvements in grade structure, we are equally concerned about the aging status of our civilian work force. The present system permits employees the option of remaining employed for as many as 15 years after attaining full retirement eligibility, while management has no option whereby it can replace senior, retirement-eligible individuals with younger, potentially more versatile employees.

The problem has been compounded in recent years by the sharp downward trend in our civilian employment as we have moved to a peacetime posture. Reduction-in-force procedures tend to increase the average age of the work force and inhibit the development and retention of recently recruited younger employees. U.S. Civil Service Commission statistics show that 16.3 percent of the total civilian work force in June 1972, were over 55 years of age, compared with 15.7 percent in June 1970. It is significant, too, that approximately 16 percent of the Federal civilian employees in 1970 who were over age 55 had more than 30 years of service, while nearly 21 percent of the 1972 work force over age 55 had more than 30 years of service.

In an effort to increase retirements during periods of manpower turbulence, legislation was obtained (PL 93-39) in June 1973, which during periods of major reductions in force permits employees with 25 years of service (regardless of age) and with 20 years of service at age 50 to optionally retire. Although PL 93-39 has provided some relief, the problem could be further eased if we were granted some measure of authority to initiate retirement on a selective basis. We would propose such retirement for those Civil Service employees who meet the requirements for optional retirement eligibility and whose retirement would permit the retention of younger members of the work force who would otherwise be separated by reductions in force.

As presently constituted, the Civil Service retirement system provides management with little or no role in deciding which employees are to retire and at what time. The only true options are vested in the employee who can retire

anytime he wants after age 55 if he has completed 30 years of service—but who doesn't *have* to retire until he reaches age 70 or becomes disabled.

A reasonable middle ground would be to authorize the selective retirement of employees at the GS-13 level and above who are at least 55 years of age and have at least 30 years of service. Their agency should have the authority to compensate them accordingly through a supplemental benefit. This proposal would give management a cost-effective option approaching that long given employees. It would also leave protected those employees who have insufficient service to receive full annuities.

c. *Minority Employment.* Our performance in civilian minority employment has been better in the blue collar sector than it has for white collar workers. Minority representation in Wage Grade employment has remained above 25 percent despite sharp cutbacks in the blue collar work force between 1969 and 1973. While the total number of Wage Supervisors also fell during this timeframe, the number of minorities holding such positions has increased from 3,663 to 4,268—a 22.5 percent rate of increase.

Improvement in white collar (GS) Defense employment has not kept pace with our progress in blue collar minority employees and supervisors—or with the rest of Federal GS employment. In 1967, minority employment at the GS 9-11 levels was 6.5 percent, close to the 7.0 percent of non-Defense agencies. By 1973, it had only risen to 8.2 percent while the non-Defense agencies had reached 11.0 percent. The same held true at the GS 12-15 levels: 3.1 percent in 1967 vs. 3.5 percent for the rest of the Federal Government; increasing to 4.4 percent by 1973, when the rest of government had reached 6.2 percent. We are seeking to improve our record in this area through more diligent executive search for minority candidates whenever vacancies occur.

Of those Defense contractors reviewed during the first three quarters of calendar year 1973, total employment had fallen 136,000 since 1969, while minority employment had increased by nearly 57,000. We have reason to believe that this trend will continue.

E. SPECIAL PROBLEMS

1. *Race Relations.*—Race relations in the Services remain a problem as racial incidents continue to occur. The fact that disciplinary measures are often perceived by minorities to be impacting on them in an inequitable manner serves to further exacerbate their frustrations and dissatisfactions. These perceptions contribute to polarization which in turn leads to confrontations.

The principal program designed to offset these problems is the race relations education program, the nucleus for which is the Defense Race Relations Institute (DRRI) at Patrick Air Force Base, Florida. Upon completion of training at DRRI, graduates of the Institute (approximately 1,200 each year) are expected to conduct race relations training within their respective Services. A Racial Perceptions Inventory Study is currently being developed on a contract basis which will enable commanders to assess the effectiveness of this training.

We require race relations training each year for all military personnel. In addition, all General and Flag rank officers receive special race relations orientation and equal opportunity management courses.

Most of our equal opportunity thrusts have been directed toward the black-white problem. Historically, the concerns of other minorities have been overshadowed by their small statistical representation. As gains for black Americans have become visible, though, these minorities have begun to seek improvement in their own lot and to rightfully demand their constitutional share of the benefits of our society. The specific problems of all minorities in the Services are now being addressed through the curriculum at the Defense Race Relations Institute.

While substantial gains have been made in enlisted minority accessions, a continuing need exists for more minority officers of all types. Increased emphasis has been placed on this aspect of recruitment, but progress to date has been slow and is expected to continue in this vein—particularly in view of the highly competitive alternatives available in the private sector.

Our present directive pertaining to off-base housing is the strongest and most effective document promulgated on this subject to date. It now protects women, permits the use of verifiers in cases of suspected discrimination, requires commanders to impose 180-day sanctions against violators, provides greater relief for complainants and extends application overseas.

2. *Drug Abuse Control.*—The Department of Defense still has many serious problems concerning drugs and alcohol in the Armed Forces and will continue to have them to a certain extent as long as the abuse of these substances remains endemic to our society. However, the use of heroin, which was the most alarming problem in 1971, has abated considerably, and problems with other types of drugs also appear manageable at this time. Service programs for identification, treatment/rehabilitation and prevention through education continue to be refined and new, innovative techniques developed.

Identification of the drug abuser remains the key to reducing and controlling the drug problem. The major objectives of the present identification program are: (1) to identify drug abusers at an early point, before serious physical or psychological harm has occurred; (2) to provide a degree of deterrence for some individuals who might otherwise be inclined to experiment with illegal drugs; and (3) to provide improved data on the prevalence of drug abuse by area.

Our exemption policy which enables self-referral to treatment programs on a non-punitive basis is our most effective means of identification. Under this policy, more than 73,000 Service members involved with drug abuse have volunteered to receive treatment and rehabilitation. Not only does this approach exempt the Service member from disciplinary measures, but it also enables him to leave the Service under honorable conditions if in-Service rehabilitation doesn't prove feasible.

The DoD urinalysis screening program is another effective method of identifying drug abusers. Rigorous sensitivity standards identify the casual or experimental user as well as those who are more seriously involved. Eleven regional drug testing laboratories are presently in operation, which have to date handled more than 4,000,000 tests.

All Services have developed treatment/rehabilitation programs which have proven effective in returning the majority of drugs abusers to duty. The disposition of recently identified military drug abusers as of the end of FY 1973 is as follows:

JUNE 1971-73

	Number	Percent
Rehabilitated and returned to duty.....	44,692	52.0
Still undergoing rehabilitation.....	8,609	10.0
Separated after rehabilitation.....	27,606	32.1
Transferred to Veterans' Administration hospital for additional treatment.....	5,107	5.9
Total.....	86,014	100.0

From a peak of 8,818 discharges reached in calendar year 1971, administrative discharges for drug abuse continue to decline. For the first six months of CY 1973, only 1,820 discharges were given. This can be attributed to a decline in the incidence rate of drug abuse, full implementation of the exemption program, and the success of rehabilitation programs in returning servicemen to duty.

3. *Alcohol Abuse.*—The Department of Defense alcohol abuse prevention program has been implemented worldwide for all Services. Educational material has been made available for all personnel, and courses of instruction in alcohol abuse prevention are to be included in all school curriculums, from basic training through the Service Academies.

Emphasis on guidance and counseling for the individual who experiences difficulty with alcoholism is reflected in the increased admissions rates at treatment facilities.

	Calendar year 1972	January-June, Calendar year 1973
Army.....	5,255	5,344
Navy.....	1,059	1,134
Air Force.....	408	341

Reporting procedures for rehabilitees are being refined to provide follow-up for determining the success rate of treatment.

V. MANAGEMENT

In this final chapter of the Defense Report, I would like to describe briefly the principal management improvements that Deputy Secretary of Defense William P. Clements, Jr., and I are pursuing. Our emphasis is on improvements in four areas:

Planning and management guidance given to the Military Departments and Defense Agencies,

Management of the weapons acquisition process,

Achievement of efficiencies and economies in the support structure, and

In this difficult time of energy shortage, ensuring that we have good energy management and conservation practices.

A. PLANNING AND MANAGEMENT GUIDANCE

Deputy Secretary Clements and I decided to continue the practice of our immediate predecessors and give the Services budget guidance rather than detailed force guidance.

Budget guidance, in our view, together with my general defense planning guidance and the military planning guidance of the Joint Chiefs of Staff encourages the Services to analyze more fully the tradeoffs between alternative uses of resources. Naturally, this guidance takes into account the needs of the Department as a whole. It aims at ensuring that the Services are working in the right strategic direction in shaping their program recommendations and that the Service programs are complementary, not duplicative. This policy is one of our major efforts to strike the right balance between the beneficial effects of decentralization and inter-Service competition and the adverse effects of inter-Service redundancy and excessive rivalry.

We have continued the Planning, Programming and Budgeting System (PPBS) essentially unchanged in preparing the FY 1975 program and budget. This has proved a satisfactory arrangement for preparing, reviewing and determining the force structure and major equipment programs we require. We are examining the PPBS system, however, to see how it can be strengthened and, particularly, whether or not it is possible to achieve better coverage of the support area within the PPBS. I will give you a more complete analysis on this in my next Defense Report.

We also have begun a management by objectives (MBO) program in order to focus top management attention on a key list of specific management objectives we expect to accomplish, primarily in the support area. The MBO program is being used to supplement the PPBS and to provide a "results" oriented approach to DOD management.

Both Deputy Secretary Clements and I realize, of course, that good management is not so much a matter of management systems, whatever they are called, as it is of the demonstrable results achieved. It is our intention to stress results.

We also are trying to improve the communication and interchange with the Congress on management issues and data. For example, among the most important elements of our reporting system are the Congressional Data Sheets and the Selected Acquisition Reports (SARs). In December, 1973, I initiated a review of the SAR system and directed that the results be discussed with interested Congressional committees prior to any substantial change in the system. Our goal in the review is to streamline the SAR so that it can be fully responsive to DOD management needs as well as providing Congress with the timely information it needs and desires.

The review is well underway. The review committee is considering 22 separate issues—including recommendations from the Congress, the Comptroller General, and the Department—for improvement and refinement of the SAR.

I am concerned that we achieve the right balance between Congressional oversight of the Department of Defense and the flexibility necessary within the

Department to manage our programs efficiently. Secretary Laird spoke to this issue from his extensive background in both the Congress and the Department of Defense in his final report to the Congress in January 1973. It is too soon for me to have adequate insights or specific recommendations for achieving this balance, but it is an area in need of scrutiny and discussion between us. I will have more to say about this later. I am sure the Congress will be as interested in this question as are we in the Department.

B. FORCE AGING AND MODERNIZATION

We have said that we want to keep force structure in order to maintain perceived balances. To do so, we also want to keep pace with potential adversaries in modernization. At the same time, there is a need to maintain a certain average age of systems in the force. However, the rising costs of our newer weapons systems, the relatively modest increases in real value of Defense budgets, and some previous postponements or other delays in modernization (notably those that arose during the war in Southeast Asia) have led to a significant aging problem in the force. The aging problem is seen in the increasing approach to the end of service life of particular force elements (i.e. bloc obsolescence), retirements without replacement, greater maintenance backlogs and funding requirements, and extensions of expected service life. Aging leads to significant pressures on force structure, for systems either wear out and are withdrawn from the force without replacement, or they are replaced on a less than one-for-one basis by significantly more costly systems.

Various solutions to this problem have been discussed, such as "high/low" mixes of systems, increased procurement funding, reduction of force structure where possible, and better management during the development and procurement cycle so as to reduce the unit costs of systems.

We have conducted studies of this problem in the past year. One significant effort has been to have the Services draft "extended planning annexes" which look at modernization in the force beyond the present planning period, that is FY 1980 and beyond. This was one of the recommendations of the DoD Cost Reductions Study. These extended planning annexes have been used by the Services to estimate the impact on forces in the 1980's of a constrained level of budget in constant dollars. The major variables for trade-offs in these studies were force, age and size as well as the unit costs, leaving aside consideration of performance against the future threat. Thus we have made the assumption that the presently planned force structure is generally appropriate for the foreseeable future. The studies also assumed that maintenance requirements of new equipment will be the same as those for current equipment (probably optimistic), and assumed in some cases (such as Navy fighters) that new systems will cost less than those currently being procured. These studies have also left aside the possibility of radical changes to the U.S. Defense budget or the demands of any conflicts that might occur. The studies concentrated on major acquisitions, which constitute about 65 percent of total procurement. Thus the Army reviewed in detail about \$2 billion of their annual assumed procurement budget, the Navy about \$7 billion, and the Air Force between \$3 and \$4 billion, depending on the year. The remaining procurement funds would support other procurement (munitions, spares, modifications, etc.).

The conclusions reached in these studies were that our General Purpose Forces tended to age throughout the next 15 years. Major exceptions were tanks and airlift aircraft. These exceptions were also the only cases in which the average age of the systems was maintained at half the expected service life. All other major categories of systems tended to age at a significant rate. The most pressing problem is the tactical Air Forces where the Services now project much longer system life than history would suggest is realistic. This assumption requires further study before acceptance. But whatever the assumption, the age of tactical aircraft is increasing at nearly half a year per year, resulting in an average force age of over 10 years by 1985, in comparison to the current age of less than six years.

AVERAGE AGE OF AIRCRAFT
(Years)

	1975	1980	1985	1989
Navy fighters.....	5.1	7.3	8.8	7.9
Navy attack.....	5.6	7.9	12.2	11.7
Air Force fighter/attack.....	NA	7.0	9.0	11.0

Other systems show the following aging trends:

AVERAGE AGE OF SYSTEMS
(Years)

	1980	1984	Normal life
Army helicopters.....	11.2	12.2	12-15
Army tanks.....	10.8	9.8	20-30
Navy general purpose ships.....	11.4	12.9	25-30
Air Force airlift aircraft.....	17.0	15.0	20-25

These average ages compare to projected lifetimes shown below. Life projections are based primarily on engineering service life estimates and do not reflect technical or tactical reasons for changing models. In general, while the experience column below reflects the combination of all reasons, the air frame service life should be expected to exceed the actual service life. Using historical experience with the life of systems as the basis for projecting the life of newer systems would tend to increase the magnitude of the aging problem, since more new aircraft would have to be procured in order to keep the force at an acceptable age. More rapid turnover of the inventory would be the result.

Experience versus projected lifetime (fighter/attack aircraft—years)

Experience:	Projection:
F-8..... 10.0	F-4B/N..... 17.5
F-100..... 18.0	F-14..... 19.6
F-105..... 16.0	A-7..... 20.2
F-104..... 10.0	A-6..... 18.4
A-1..... 20.0	

We have attempted to make some estimates of the resources needed in the 1980-85 period to stabilize the aging process for all major classes of weapons, and suspect that as much as a \$1 to \$2 billion increase in major procurement funding may be needed in that period to stop the aging process if no force level changes are made. Rolling back the age of equipment would take more and would depend on how long we wait.

In the budget review of the past several months, we have initiated and accelerated a number of procurement programs for existing proven systems in order to arrest again while maintaining force structure. We have also funded system reworks and modifications which should contribute to extending the service life. We will now make sure that our estimates are correct. We will also set long-term force level goals and realistic long-term funding expectations. Certainly more stability in planning Defense resources than we have had heretofore would be of assistance. Whether the international situation, conflicts, or domestic considerations will permit this remains to be seen. We are also attempting to reduce the age of weapon systems by the following measures:

Improved independent cost analysis in the Services and OSD. The cost analysis improvement group (CAIG) was established in January of last year. It is described in greater detail later in this section.

Design to Cost. Production unit costs have been established by defining unit cost thresholds in the development concept paper (DCP) approved by the Deputy Secretary. The cost threshold obligates the program manager to attempt to develop a weapons system that can be acquired within the cost threshold.

"Fly Before Buy". Operational test and evaluation (OT&E) before production has received major emphasis with the establishment of a Deputy Director of Defense for Research and Engineering for T&E. DOD Directives now require an initial operational testing phase prior to the production decision. This should reduce the need for costly modification and retrofit programs after production initiation and should increase the probability of avoiding major failures in production systems.

Prototype Programs. A few prototype development programs have been initiated which may provide low cost procurement options without requiring in advance a commitment to procurement.

Low Cost Systems Development. Systems such as the A-10, patrol frigate, and Sea Control Ship were conceived as low unit cost weapons systems.

In conclusion, the program we have presented this year should enable us to keep the greater part of the present force structure while making significant progress in replacement and modernization. However, we have some indications of significant aging problems which will come upon us in the future, particularly in the 1980-85 time period. This may require some significant changes in procurement programs in the coming years.

C. THE WEAPONS ACQUISITION PROCESS

In December 1972 a study was completed in the Department and subsequently reviewed in detail by Deputy Secretary Clements recommending improvements in our weapons acquisition procedures. During the last year a number of decisions have been taken to implement the major recommendations. The principal changes are noted in the following report sections on long-range planning and review and weapons systems cost reduction.

1. Long Range Planning and Review.—We are preparing three experimental Mission Concept Papers (MCPs) on strategic offense, continental air defense, and theater air defense. These papers are planning documents designed to provide an understanding of the broad functional and fiscal context into which proposed new systems should fit during their development, acquisition and operational life. The MCPs include assessments of the threat, resources currently projected as available for the specific mission area, potential military needs, and major deficiencies in projected operational capabilities. They will have the following uses in the procurement of new weapons systems:

- Early identification of new technology required.
- Aid in setting unit cost targets and evaluation of affordability.
- Planning for efficient use of the industrial base.
- Estimating resource allocation and availability.

Scheduling weapon system development and replacement, including force implications of new developments.

2. Weapons System Cost Reduction.—To decrease the cost associated with the greater performance demanded of replacement weapons systems, we are making a sharp distinction between systems that are needed and those that are "nice to have". As obvious as this sounds, its implementation requires that we have clearly established force objectives and requirements. We are doing this in Development Concept Papers (DCPs) and within the Defense Systems Acquisition Review Council (DSARC). We are structuring our forces with the "Hi-Low" force mix concept. For a particular mission, we would have a small number of high-performance, sophisticated weapons capable of coping with the maximum enemy threat and a larger number of less sophisticated and less expensive but capable weapons for countering the lower capability enemy threats.

We are changing our weapons acquisition objectives from an emphasis on improving the state-of-the-art in performance to an emphasis on quality equipment having an acceptable performance for an affordable cost. When a requirement for a particular weapon system is objectively substantiated, we ask how this need can be satisfied as economically as possible. Controlling of sophistication must be accomplished very early in the weapons system life cycle process. We cannot afford unnecessary items in any system, and we must adhere to the requirement that any post-contract design changes be tied to decisions on dollar availability.

Having decided on design essentials, the designer must focus clearly on unit production costs, as well as on the cost of operating the system, before the design

goes into production. In order to do this, we have asked "Request for Proposal (RFP)/Contracts Requirement Review Boards" set up in all Services to examine RFPs and contracts to ensure:

Minimum use of exclusive military material specifications in favor of more general commercial standards and practices where practicable.

Promotion via RFPs of full use of "off-the-shelf" and/or standardized components developed for either military or commercial use.

Maximum flexibility allowance in contractor design to encourage tradeoffs in performance, schedule or other specifications for savings in acquisition or life cycle costs.

We have developed a design-to-a-cost concept within the Department that makes cost, along with performance and schedule, of primary management concern throughout the acquisition process. The Services have submitted unit fly-away cost goals for major systems still in development. These will be the basis for determining design-to-a-cost goals. By the end of the fiscal year, our plan is to have extended these procedures to all major weapon systems where it is possible to use them.

With design-to-a-cost, the Services and their project managers will have the authority to make the performance and schedule adjustments necessary to achieve cost goals. For future programs, a design-to-a-cost estimate will be established at the earliest possible date, but not later than entry into the full scale development phase of the acquisition process.

A Cost Analysis Improvement Group (CAIG) was established within OSD to assess the reasonableness of cost estimates and the criteria used in their development. At the same time, each Service has developed a staff component capable of preparing independent parametric cost estimates. These Service components, working with the OSD CAIG, prepare an independent cost analysis each time a weapons system is reviewed by the DSARC.

The CAIG is still too new for us to assess fully the effect it will have, if any, on reducing cost growth. Some results, however, already are evident. The development of a separate cost estimate, free from the optimism and pressures of the program advocacy channels and using different techniques, has provided an independent and objective check on the reasonableness of the project manager's estimate. Perhaps the most important benefit, however, has been that conflicting cost views become visible at the top level, thus allowing free and open discussion of the cost issues involved in defense systems procurement at the highest policy levels before important decisions are made.

We are emphasizing the use of new technology for reducing costs and improving reliability as well as for increasing the performance and range of capability for our weapons systems. New technology is useful, however, only when it becomes a proven scientific or engineering capability ready for application. DoD has a record of too often adopting new technology that is insufficiently proven and then having problems in system development which cause unanticipated increases in cost. This situation must be corrected. Spending more on experimental prototype demonstrations of new technology and demanding demonstration before its adoption ("Fly-Before-Buy") can yield highly leveraged, multifold savings in the later costs of engineering development and production. New technology can be used directly to save money by:

Simplifying design, decreasing materiel and manufacturing costs and increasing shelf or service life.

Improving safety and ease of handling of weapons, equipment and material thus decreasing the logistic and maintenance support required.

Providing knowledge and the apparatus necessary to automate manufacturing and logistic operations in order to gain manpower savings.

New technology can be applied indirectly to save money through increases in effectiveness of weapons systems or through design of modular components useful in more than one weapons system.

Within a relatively fixed total DoD budget, any savings from technology applications will hopefully be realized in the form of military potential retained in the face of an increasingly competitive environment. Such savings could help to keep us from "pricing ourselves out of the market". Savings in the form of retained capability are not easily measured and, consequently, are hard to prove. They are nevertheless real and important. New technology will yield savings only if we take a hard line in limiting the application to meeting truly essential requirements in efficient ways. This we intend to do.

3. Project Managers.—The success of a major weapons system acquisition program is determined not only by our ability to acquire equipment which meets the stated technical performance objective within planned schedules and costs, but also by how effectively the system operates in combat and by its ability to be supported and maintained in the field. The project manager's responsibility encompasses all these aspects of weapon system development and acquisition. Experience, good judgment, and a long tour in the assignment are essential if the project manager is to meet these responsibilities successfully. Recognizing this, the Services are continuing to place greater emphasis and importance on selection of project managers, on giving them the authority and accountability required to run their programs and then on keeping them in the job for a longer period of time. Examples of Service efforts are noted below:

The Navy bases the selection of Navy major project managers on selection board procedures similar to those used for the selection of command officers of major combatant ships, since the project manager position is the equivalent of a major combatant ship command in terms of career enhancement. The other Services have placed equivalent emphasis upon attaining higher caliber individuals for project managers assignments.

The Army has increased the average tenure of project managers. The tenure of officers reassigned during the period January 1 through June 30, 1973, was 3.3 years as compared to 1.3 years during the same period in 1969. Similar or greater increases in tenure time have been shown by the other Services.

The Services are seeking ways to streamline the reporting requirements of the project managers to higher authority. Under the Air Force "Blue Line" reporting system, for example, the project manager is allowed direct communication with the commander of the Air Force Systems Command, the Air Force Chief of Staff and the Secretary of the Air Force. He uses "after-the-fact" reporting to intermediate commanders.

In order to ensure that the Services continue to place a high priority on acquiring and keeping able people as project managers and that the project managers are given the authority, responsibility and accountability required to successfully accomplish their tasks, we have formulated a project manager objective as part of the Management by Objective program. It consists of:

Increased emphasis on education and experience in selection of project managers.

Greater promotional opportunities for project managers.

Equating major project managers with major commands in terms of career enhancement.

Rotation of project managers to coincide with program milestones rather than an arbitrary date. This allows longer tenure for project managers.

Clearly defined charters from higher authority to the project manager delineating his range of authority and responsibility.

Accountability to higher authority by the project manager for the successful and timely completion of project milestones.

D. SUPPORT STRUCTURE

I am placing intense management effort on the realignment of our support structure. The Services, Defense Agencies and the Office of the Secretary of Defense are critically examining the requirements and needs of the operating forces for support. It is my intention to allow the Services to reallocate to the combat force those resources saved by decreasing and consolidating the support establishment. This conversion of support resources to combat resources provides an incentive and the means by which the military Services can help to maintain the level of combat forces necessary for our national security. We are seeking "swords from fat".

1. Base Realignments.—The DoD base realignment program has as its objective the significant reduction of operating costs by reviewing the use of military installations at home and around the world and by reducing or realigning those bases which must be kept. Reduction of operating costs is being approached in a two-phased program.

In the first phase, and within a short timeframe, we expect to reduce or realign a variety of bases both here and abroad as the result of internal military department management improvements. The Service Secretaries have advised

me that when these actions are completed they will have drawn down the military base structure to a level consistent with current force structure support.

In this connection, I would like to point out that over the past decade there have been almost 3,400 separate actions taken to close, reduce or realign military installations on a worldwide basis. These actions have resulted in the reduction of approximately 700,000 military and civilian personnel.

It is obvious, however, that the Defense Department must press ahead toward the achievement of additional savings in the overhead and support areas associated with military bases. If we do achieve, in fact, a military base structure consistent with the requirements for support of current forces then we must move on to the next plateau. This involves a concerted effort to maximize the cross or joint Service utilization of bases and facilities. This is not seen as cross or joint Service use in the rather conventional sense of similar but separate Service facilities at a single installation. Rather it is seen as the sharing of certain logistical functions that give evidence of commonality. Such functions as aircraft and vehicle maintenance and repair fit this context, for example. There are several others.

Additionally, we are reviewing the organization of the military departments with respect to the numbers and kinds of headquarters and headquarters facilities. Given the significant reduction in size of the Armed Forces over the past several years, opportunities now exist to consolidate or eliminate some of these headquarters activities.

2. Standardization of Management Systems.—Many of the basic characteristics of management systems within the Department are common to more than one DoD component. Significant advantages can be realized if these management systems are standardized with respect to system design and related automatic data processing equipment and procedures. Among the advantages are more effective use of limited personnel resources with hard-to-find talents, reduced training requirements, ease of audit and management review. Although standardization of management systems has been a consideration in system design in the past, we feel that increased emphasis from top management in the Department will bring further improvements. Our particular targets are those different systems operated by different defense components to perform essentially identical functions. Differences which are essential to satisfy inescapable variations in component missions will be accommodated, but unnecessary differences, which exist only because of long term usage, will not be tolerated.

As part of our management by objectives program we have established a task force under the direction of the Assistant Secretary of Defense (Comptroller) to standardize defense management systems where standardization will reduce systems development or maintenance costs, or operating costs, without sacrifice of support essential to management.

3. Support Cost Accounting by Weapons System.—Support costs in general are not accounted for along weapon system or support system lines. It is not possible with the present DoD management and accounting system to find out, without a specific large-scale study, how much we spend to support specific weapons systems. Nor is it possible to assess easily the impact on readiness of alternative budget allocations which relate to these costs. Present management guides and controls are inadequate to give confidence that reductions do not impact readiness.

The Department of Defense management and accounting system is designed primarily to identify costs organizationally and functionally. In the interest of more efficient management of the resources used in operations and maintenance of weapons systems, we believe it is necessary that we have cost-effective management and accounting of support costs by weapons support system. The break-out of operation and maintenance cost by weapon or support system is necessary to meet our major goal of optimum readiness within budget constraints. While there have been previous efforts to establish equipment maintenance cost accounting by weapon support system, these have been limited in scope, and implementation is only partially complete.

As another one of our management by objectives actions, we have established a task group to consider management focus, data needs, data systems and cost, system uniformity and phasing of implementation to develop a system to identify maintenance and other operations costs by weapons or support system.

4. Logistic Support Aspects of Weapons Acquisition.—The improvement of reliability, maintainability and life cycle support of new weapons is receiving

increased emphasis within DoD. Logistic support is a major design parameter with the objective of reducing the number of equipment failures, cutting repair costs, and decreasing distribution and inventory costs of components through greater standardization. To assure that design objectives are reached and that required logistic planning has been accomplished, a plan for logistic support has been made an integral part of weapons system development plans. Demonstration that logistic design parameters have been achieved is a major objective of developmental and operational testing and evaluation. System program managers have been charged with the responsibility for assuring that support resource requirements are integrated with operational requirements to accomplish successful deployment of new systems.

5. *Logistic Systems Management.*—Many of the logistics systems within the Department were, for the most part, developed individually by each of the DoD components in support of their separate logistics operations. The lack of centralized planning and control of these systems has been noted by Congressional committees, the GAO, and OSD study groups such as the President's Blue Ribbon Defense Panel (on which Deputy Secretary Clements served) and the Joint Logistics Review Board.

Specific criticisms have been directed toward the need for OSD to strengthen its overall direction and control of these systems; to reduce their proliferation; to increase their functional and technical compatibility, interface, standardization and integration across the DoD components; and to better manage the rapid increases in development costs associated with highly integrated systems using third generation computers and advanced telecommunications.

To alleviate these criticisms we have taken several specific management actions in the last few years in cooperation with the DoD components. Among these were the establishment in 1970 of a DoD Logistics Systems Policy Committee (LSPC) whose principal goal was to develop coordinated long range logistics objectives and assign implementing actions. Among the recommendations of the LSPC was integration into single Defense agencies of separate Service organizations for management of subsistence stocks and for property disposal management.

On October 1, 1973, implementation of the plan for worldwide integrated management of subsistence stocks began. This plan consists of two phases: Phase I brings all wholesale stocks into an integrated management system and Phase II extends that system to all retail stocks. The Defense Supply Agency will be authorized overall policy and direction in the area of inventory management of wholesale subsistence stocks. Despite this fundamental change, requisitioning procedures for ships and units remain the same and thus little disruption or confusion will be caused at the user level. The integrated nature of this system will allow us to be more fully aware of what we need, what we have, where it is, and how to move the DoD subsistence stocks most efficiently. There are a number of small problems remaining in the implementation, but we are confident that this new management system will prove to be both economical and responsive in peace or wartime.

A plan to integrate the DoD property disposal program on a worldwide basis became a reality on July 1, 1973, when the Headquarters of the Defense Property Disposal Service (DPDS) became fully operational. DSA will exercise overall responsibility for the program to include centralized policy direction, inspection, and audit functions.

Program management and staff supervision are to be exercised by the DPDS. Major features of this integrated management effort are worldwide inventory management, worldwide management information and a centralized accounting system.

6. *Reduction of Items in Inventory and Elimination of Duplicate Inventory Management.*—The support of U.S. Armed Forces is expensive in terms of materiel costs and management effort. The use of improved technology in communications, automation, transportation and distribution will offset some of the funding problems. Innovative management can provide economical support without disrupting essential missions. Our military supply system must include only the minimum number of items required for effective Service operations. Not only must older, seldom-used items be phased out of the system, but the vast range of sizes, types and varieties of the same basic item must be reduced. Efforts to control proliferation of items in the inventory are necessary for an economical support system.

A program for eliminating duplicate management of consumable items in the Department of Defense is now in effect. The responsibility of each military Service to procure and manage the items it needs and uses has resulted in the past in competition between the Services for procurement of available materiel. With the advent of an integrated materiel management of consumable items program, a single manager is designated to assume total wholesale logistic support responsibility for all users of a single item. He is no longer an Army, Navy or Air Force manager exclusively. He has become a DoD manager obligated to provide impartial support to all military Service customers. The effort marks a major milestone in attaining a logistics objective of one item/one manager.

While management responsibilities have been determined for all consumable items, there still remains the task of transferring responsibilities and inventories from one or several managers to another. A special joint task group is monitoring the completion of the logistics support responsibility realignments.

7. Productivity Program.—In August 1973 Deputy Secretary Clements established a DoD productivity program under the leadership of the Assistant Secretary of Defense (Installations and Logistics). The objectives of the program are to:

- Promote productivity improvements at all levels of responsibility throughout the Department.

- Foster the development and use of productivity measurements.

- Establish a working environment giving full consideration to meaningful and mature worker/manager relationships in which both can fully participate and realize mutual benefits.

The program includes coordination of productivity improvement efforts within the Department and development of a management information system which will provide useful productivity data for DoD management purposes.

Management efforts in the productivity program are geared toward workload stabilization, procedures simplification, organization realignments, application of human engineering and productivity improvements through capital investments. All of these efforts are necessary to offset the increased cost of personnel.

Enhancing productivity through capital investments is a relatively new emphasis within the Department which can make significant contributions toward improved productivity in future years, and the Army Materiel Command (AMC) initiated a test program on this in FY 1973. The Ammunition Procurement and Supply Agency (APSA) was given authority by AMC to administer a capital investment program at government-owned contractor-operated plants without requesting prior approval for each project from higher command. Of 24 projects approved, 15 had paid back their costs by the end of December 1973. The total cost of the 24 approved projects was approximately \$480,000. The savings will be \$1.7 million annually if current production rates continue. With the success of this test program, AMC has budgeted \$1.9 million for the program in FY 1974.

Within the entire Department the potential applications of the APSA test are significant. The Air Force has initiated a program whereby the Air Force Logistics Command has been given approval authority for depot maintenance facilities projects and the Navy is reviewing the possibility of applying a similar program.

E. ENERGY MANAGEMENT AND CONSERVATION

DoD energy consumption represents a \$2.5 billion item in our FY 1974 budget, mostly to be spent for procurement of petroleum fuels. Recognizing that this area represented a prime opportunity for economy and better control of fuel distribution, we placed bulk petroleum fuels under integrated management control as of July 1, 1973. This was implemented through the transfer of personnel and petroleum stocks, excluding "on-base" stocks, to the Defense Fuel Supply Center (DFSC) of the Defense Supply Agency.

The timeliness of this move was evident as the system was put to its first real test almost immediately with the advent of the oil embargo. As significant

shortages of bulk fuels began to occur, we were able to distribute the diminishing resources more effectively. This was particularly important when the immediate effect of the oil embargo was the cutting off of our overseas forces from local sources of fuel, necessitating replenishment of depleted stocks directly from the United States. A current inventory and location of bulk fuels in support of the Mediterranean forces was quickly available, and an assessment of product availability and measures necessary to provide continuing support to both the Navy and Air Force was developed rapidly.

In September, 1973, the Defense Energy Task Group was established to conduct a comprehensive study to define DoD energy-related problems and to recommend measures for strengthening the management of DoD energy resources. As a result of that study, a Director for Energy, reporting directly to the Assistant Secretary of Defense (Installations and Logistics), has been established with overall program manager authority for this vital resource.

The study established that the Department consumes 2.4 percent of all the energy used in the United States and 3.5 percent of the national petroleum usage. Within the Federal Government, DoD is the largest consumer, accounting for 85 percent of Government energy use. In FY 1973 DoD procured nearly half of all its petroleum from foreign sources, primarily for overseas use.

To meet the current problem, the military Services have taken strict actions to conserve fuel through reduced consumption, while trying to avoid an unacceptable impact on readiness. Among actions taken are:

- A major reduction in aircraft flying hours.

- A reduction in the speed of Navy ships during transits and operations and a major overall reduction in Navy ship operations.

- An increased emphasis on reducing energy requirements through R&D programs.

An aggressive energy savings program throughout DoD to decrease heating, lighting, and vehicle fuel use.

I am proud of the conservation performance of the armed forces which has resulted in Defense leadership of all federal agencies in energy conservation. Our currently programmed level of petroleum consumption in Fiscal Year 1974 is at the lowest level in 16 years. It is almost 42 percent below the peak consumption years of the Southeast Asia war and approximately 15 percent below the FY 1973 consumption rate.

While we shall continue to share the same hardships and sacrifices being borne by other sectors of the nation in our housekeeping and administrative support elements, we must have sufficient fuel for our combat forces to remain operationally ready. To assure this, we shall seek priority allocation under the Emergency Petroleum Act of 1973 whenever operational readiness requires.

Beyond conservation, there is at least one other action that can be taken to help meet the immediate fuel needs of the nation and thus of national defense. That is temporary activation of the Naval Petroleum Reserve No. 1 at Elk Hills, California. Within 60 days of Congressional approval, Elk Hills could be contributing up to 100,000 barrels a day or more to the nation's crude oil supply. And, within a relatively short time thereafter production could be brought up to 160,000 barrels a day. This would offset well over half the maximum potential impact imposed on the domestic economy by denial of foreign-source petroleum to U.S. Forces. To this end, I am hopeful the Congress will support the request of the Administration to achieve production from Elk Hills for one year.

In summary, our contributions to energy conservation will be:

- Using only those energy resources needed to maintain operational readiness.

- Avoiding wasteful practices and improving energy resource management.

- Obtaining priority supply under appropriate authority for only the minimum essential needs for national defense.

- Directing energy-related R&D in helping develop alternate energy sources and in improving energy-consumption efficiency.

TABLE 1.—DEPARTMENT OF DEFENSE FINANCIAL SUMMARY

[In millions of dollars]

	Fiscal year—				
	1964	1968	1973	1974 ¹	1975 ²
Summary by functional classification:					
Military personnel.....	12,983	19,939	23,639	24,452	25,898
Retired military personnel.....	1,211	2,093	4,392	5,164	6,014
Operation and maintenance.....	11,693	20,908	22,148	24,156	26,596
Procurement.....	15,036	22,550	18,574	18,653	19,867
Research, development, test, and evaluation.....	7,053	7,264	8,020	8,333	9,389
Military construction.....	977	1,555	1,464	1,821	2,150
Family housing and homeowners assistance program.....	602	614	1,009	1,148	1,273
Civil defense.....	111	86	82	82	86
Special foreign currency program.....	0	0	3	3	3
Naval petroleum reserve.....	0	0	0	0	24
Military assistance program.....	989	588	1,120	3,295	1,279
Total, direct program (TOA).....	50,655	75,597	80,452	87,105	92,579
Summary by program:					
Strategic forces.....	8,505	7,236	7,253	6,883	7,628
General purpose forces.....	16,406	30,375	25,810	27,899	29,183
Intelligence and communications.....	4,378	5,551	5,683	5,949	6,464
Airlift and sealift.....	1,044	1,756	860	973	1,053
Guard and Reserve forces.....	1,768	2,196	3,897	4,385	4,796
Research and development.....	4,813	4,277	6,463	7,003	8,409
Central supply and maintenance.....	4,639	8,422	8,643	8,873	9,330
Training, medical, other general personnel activities.....	6,959	12,183	16,361	18,193	20,078
Administration and associated activities.....	1,077	1,237	1,719	1,849	2,164
Support of other nations.....	1,066	2,364	3,762	5,098	3,474
Total, direct program (TOA).....	50,655	75,597	80,452	87,105	92,579
Summary by component:					
Department of the Army.....	12,275	24,972	21,656	22,096	23,618
Department of the Navy.....	14,458	20,765	25,425	27,575	29,568
Department of the Air Force.....	19,958	24,917	24,707	25,523	28,029
Defense agencies/OSD.....	1,007	1,519	2,008	2,165	2,649
Defense-wide.....	1,857	2,750	5,454	6,399	7,350
Civil defense.....	111	86	82	82	86
Military assistance program.....	989	588	1,120	3,295	1,279
Total, direct program (TOA).....	50,655	75,597	80,452	87,105	92,579
Financing adjustments.....	14	1,143	-49	-178	320
Budget authority (NOA).....	50,669	76,740	80,404	86,928	92,899
Outlays.....	50,786	78,027	73,828	79,500	85,800

¹ Amounts for proposed legislation for the volunteer force, military retired pay, and flight pay are distributed (\$99,000,000).

² Amounts for military and civilian pay increases, and military retired pay reform, volunteer force and other proposed legislation are distributed (\$2,242,000,000).

Note: Details may not add to totals due to rounding.

TABLE 2.—SUMMARY OF SELECTED ACTIVE MILITARY FORCES

	Actual		Estimated	
	June 30, 1964	June 30, 1973	June 30, 1974	June 30, 1975
Strategic forces:				
Intercontinental ballistic missiles:				
Minuteman.....	600	1,000	1,000	1,000
Titan II.....	108	54	54	54
Polaris-Poseidon missiles.....	336	656	656	656
Strategic bomber squadrons.....	78	30	28	27
Manned fighter interceptor squadrons.....	40	7	7	6
Army air defense firing batteries.....	107	21	21	0
General Purpose forces:				
Land forces:				
Army divisions.....	16½	13	13	13½
Marine Corps divisions.....	3	3	3	3
Tactical air forces:				
Air Force wings.....	21	22	22	22
Navy attack wings.....	15	14	14	14
Marine Corps wings.....	3	3	3	3
Naval forces:				
Attack and antisubmarine carriers.....	24	16	14	15
Nuclear attack submarines.....	19	60	61	67
Other warships.....	368	242	186	191
Amphibious assault ships.....	133	66	65	65
Airlift and sealift forces:				
Strategic airlift squadrons:				
C-5A.....	0	4	4	4
C-141.....	0	13	13	13
Troopships, cargo ships, and tankers.....	101	53	32	32

TABLE 3.—ACTIVE DUTY MILITARY PERSONNEL, CIVILIAN PERSONNEL, AND RESERVE COMPONENT STRENGTH

[End of fiscal years in thousands]

	1964	1968	1973	1974	1975
Direct-hire civilian:					
Army ¹	360	462	333	356	359
Navy.....	332	419	322	326	324
Air Force ¹	305	331	271	271	270
Defense agencies.....	38	75	72	76	75
Total.....	1,035	1,287	998	1,029	1,028
Active duty military:					
Army.....	972	1,570	801	782	785
Navy.....	667	765	564	551	541
Marine Corps.....	190	307	196	196	196
Air Force.....	856	905	691	645	630
Total.....	2,685	3,547	2,252	2,174	2,152
Reserve components (in paid status):					
Army National Guard.....	382	389	386	383	372
Army Reserve.....	346	312	284	280	252
Naval Reserve.....	132	131	129	120	111
Marine Corps Reserve.....	48	48	38	37	36
Air National Guard.....	73	75	90	92	90
Air Force Reserve.....	67	46	45	56	54

¹ These totals include Army and Air National Guard technicians, who were converted from State to Federal employees in fiscal year 1969. The fiscal years 1964 and 1968 totals have been adjusted to include approximately 38,000 and 39,000 technicians respectively.

REPORT

UNITED STATES MILITARY POSTURE FOR FISCAL YEAR 1975

(By Chairman of the Joint Chiefs of Staff, Admiral Thomas H. Moorer, U.S.N.)

Mr. Chairman and Members of the Committee: I appreciate this opportunity to present my views on the military posture of the United States. In my opinion, no task assigned senior US military leaders is more important than the duty of keeping the Congress and the American people fully informed on military matters. In the final analysis, our military posture and our national security can be no stronger than the determination of the American people to defend our Nation and its freedoms. This collective will is both developed and represented, in large measure, by Congressional attitudes and decisions. Your role in this process is vital.

In my prior assessments of the military balance and in the over 100 appearances before Congressional Committees, it has always been my intention to relate the military issue at hand to the actual and potential challenge facing the United States on the international scene. That remains my intention in this, my fourth assessment as Chairman of the Joint Chiefs of Staff.

The military posture of the United States can be judged meaningfully only by relating our military forces—both strategic and general purpose—to those of our most powerful potential adversary—the Soviet Union.

In this regard, the negotiation and signing of the Treaty on the Limitation of Anti-Ballistic Missile Systems (ABM Treaty) and the Interim Agreement on Certain Measures with Respect to the Limitation of Strategic Offensive Arms (Interim Agreement) constituted first steps in our effort to restrain the obvious and destabilizing momentum of the USSR strategic force buildup and to establish some control over the deployment of significantly increased strategic forces by both the US and USSR. The force levels for the US and USSR established by the ABM Treaty are equivalent, but the numerical ICBM and SLBM force levels authorized for the Soviet Union by the Interim Agreement are larger than those authorized for the United States. Because of technological and other strategic offensive advantages possessed by the United States, this temporary imbalance was considered acceptable, particularly when weighed against the advantages of reaching some agreement on limiting strategic arms. In the Joint Resolution authorizing the acceptance of these agreements, however, you will recall that the Congress specified the President should seek a future agreement which "would not limit the United States to levels of intercontinental strategic forces inferior to the limits provided for the Soviet Union." Compliance with this Congressional mandate is a primary objective of the current follow-on negotiations to conclude a permanent agreement.

I report to you today that aggressive modernization programs, which could place the United States in a position of strategic inferiority in the foreseeable years ahead, now are being undertaken by the Soviet Union. These programs, although aggressive, are within the terms of the Interim Agreement now in effect. If we are to maintain our relative position, we must continue the development and deployment of the strategic systems requested by the President and must continue to insist upon the equivalence which the Congress so wisely has called for as an ultimate goal in our Strategic Arms Limitations negotiations.

With regard to the balance between the general purpose forces of the Soviet Union and the United States, I have noted with apprehension for the past several years that a major shift in the naval balance is taking place. The US still has the edge with regard to the projection of our naval power as a result of the global reach of our fleets through our carrier and amphibious task forces. The USSR, however, is building a modern and increasingly powerful naval force capable of interdicting sea lines of communication and obstructing this projection of our military power across the oceans to assist our allies. The exact role of the new Soviet carrier force is not clear, but we may be sure that it portends a new era in the projection of seapower by the USSR.

The tactical air forces of the Soviet Union are in the midst of a major and significant modernization program. The program appears to be directed at overcoming the long-standing qualitative advantage held by US tactical air forces in the ground attack role. The Soviet tactical air forces hold major quantitative and some qualitative advantages in the air superiority role.

The Soviet weapons and equipment observed in the Middle East, together with other evidence, clearly show that the large USSR ground forces also are being modernized with new tanks and new combat vehicles, as well as new and sophisticated combat support weapons and systems. Additionally, there are indications that the Soviet Union is developing air mobile units with ground attack helicopter support which, when combined with its new tanks and combat vehicles, will increase the tactical mobility and firepower of its ground forces.

The strategic programs of the Peoples Republic of China (PRC), by contrast, are proceeding somewhat slower than estimated last year. We still expect the Peoples Republic of China, however, to deploy by the end of this decade a small, but effective, ICBM force which will be capable of striking all of the Continental United States. PRC general purpose forces are being modernized, but also at a relatively slow rate—when compared with those of the US and USSR. Nevertheless, the Peoples Republic of China is continuing to increase its overall military power.

Events of the past few months in the Middle East once again have proven that the military balance must be assessed on the capabilities of potential adversaries rather than on their announced or estimated intentions. Intentions change much more quickly than capabilities and often change solely on the basis of the opportunities that a lack of opposing capability presents. Therefore, the only sound course of action for our future defense planning is to analyze, as best we can, the military balance between the United States and opposing forces based on the capabilities of existing forces projected over the next few years.

Before I turn to the first set of charts, I would like to remind you of the principal caveats.

First, the US force data are drawn from the currently projected Five Year Defense Program. USSR and PRC data are based on the latest intelligence estimates and projections. Both US force data and USSR estimates assume that the ABM Treaty and the Interim Agreement will remain in force for the next five years.

Second, the intelligence organizations can estimate with a fair degree of precision the forces our opponents will have operational in the next year or two. Beyond that point, the estimates become less certain.

Third, while the intelligence organizations cannot predict quantitative deployments very far into the future, they can provide a good indication of the kinds of weapons systems which may be deployed several years from now.

Finally, some degree of personal judgment cannot be avoided in comparing the military posture of one nation with another. Consequently, some of my colleagues may disagree with me on specific details, but I believe there is a general consensus within the Defense Department on the fundamental aspects of these comparisons. You will have, of course, other opportunities to discuss these matters when each of the Service Chiefs presents his report on the major programs of particular concern to his Service. For this reason, I will give somewhat more attention to the ongoing initiatives of the USSR and PRC than to those of the US.

STRATEGIC FORCES

I have emphasized in the past that no task is more important, from a military perspective, than that of developing, maintaining, and protecting a credible strategic deterrent. Detente, offering the opportunity for relaxation of tension, requires that we be strong enough to negotiate with confidence and to insure that our good will is not misconstrued as lack of will, thereby encouraging confrontation. This task presents many challenges because, in making an assessment of the military capabilities of our potential adversaries, we cannot afford to look only at the capabilities of those forces in being today. The long leadtime of modern strategic weapon systems demands that we also devote our best efforts to the evaluation of the relative military balance as it is likely to evolve in the years ahead and as it is likely to be perceived in the eyes of our potential adversaries, our allies, and the rest of the world. If we are to maintain a credible strategic deterrent, actual military strength is essential, but the appearance of military strength cannot be neglected.

Significant US and USSR initiatives—Strategic offensive systems

Shown on Chart 1 are the ongoing US and USSR strategic offensive initiatives which will have significant impact on the strategic balance. I will highlight these initiatives so that the dynamic nature of military balance for the foreseeable future can be fully understood.

SIGNIFICANT US & USSR INITIATIVES STRATEGIC OFFENSIVE SYSTEMS

US		USSR
	ICBM	
MINUTEMAN III SILO MODIFICATION		SS-X-16 SS-X-17 SS-X-18 SS-X-19 NEW SILOS SS-11 MRV SILO MODIFICATION
	SLBM	
POSEIDON CONVERSION TRIDENT C-4		SS-N-8 DELTA SS-N-6 IMPROVEMENTS
	BOMBERS	
B-1 B-52 MODIFICATIONS		BACKFIRE

CHART NO 1

The Soviet Union clearly has embarked on an unprecedented major commitment to the modernization of its strategic offensive force.

Four new ICBM designs of varying classes and characteristics currently are being flight tested. These new systems will incorporate improved launch, guidance, and reentry techniques, which will permit the USSR to introduce accurate MIRVs into its missile inventory. A corollary of these significant new missile programs is the parallel construction and modification of hardened silos, capable of surviving appreciably higher overpressures and ground shocks. Additionally, a multiple reentry vehicle (MRV) version of the SS-11 is being deployed rapidly in some of these new silos for "light" ICBMs.

The USSR has moved forward rapidly in modernizing its SLBM force. The new 4200 nm SS-N-8 has been deployed aboard the first three DELTA-class submarines—now in series production. Improvements for the SS-N-6, the SLBM deployed aboard YANKEE-class submarines, may be nearing operational status. This new MRV variant of the SS-N-6 is expected to have a slightly longer range and may be deployed in YANKEE-class submarines.

We are uncertain as to the exact military role of the new BACKFIRE variable-geometry wing, supersonic bomber. It is certainly capable of performing intercontinental attack missions, but it is probably best suited for peripheral attack. We anticipate that it will be assigned both roles.

In contrast to the Soviet Union's dramatic program, ongoing US initiatives in the strategic arena are modest and deliberate. The United States does not have any new ICBM systems under engineering development, but it is carrying out advanced development work on improved ICBM technology. Continued improvements also are being made in both MINUTEMAN II and III systems. By the end of FY 1975, all MINUTEMAN Is will be replaced by MINUTEMAN IIIs. Additionally, the hardness of MINUTEMAN II and III missiles and silos is being upgraded, and a Command Data Buffer system is being installed to permit the rapid remote retargeting of MINUTEMAN III missiles. These improvements are

designed to increase further the survivability, flexibility, and responsiveness of our MINUTEMAN force.

As was noted last year, the last of the POLARIS A-2 SLBMs will be phased out of the US force by mid-1974. By mid-1977, the planned POLARIS-to-POSEIDON conversion program will have been completed. At that time, we will have 31 POSEIDON submarines and 10 POLARIS A-3 submarines. The first TRIDENT submarine, with the new 4000 nm C-4 missile, is expected to enter the force in FY 1979.

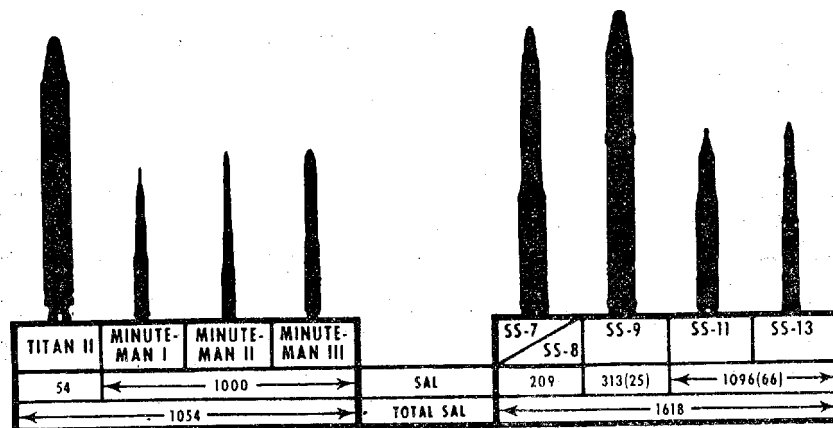
The B-1, which is being developed as a replacement for a portion of the B-52 force in the 1980s, will begin flight testing this fall. The results of the flight testing will be examined carefully prior to a production decision being made next year. In the meantime, funds are included in the FY 1975 budget request for modification of 80 B-52D bombers to insure their availability until the B-1 is capable of entering the force in adequate numbers to allow for retirement of the B-52D.

US and USSR ICBM forces

Shown on Chart 2 are the principal US and USSR ICBMs currently deployed. Before discussing the individual characteristics of these ICBM systems, a brief review of the Interim Agreement on Strategic Offensive Arms is appropriate so that the operating international legal constraints applicable to the US and USSR may be recalled.

At the bottom of Chart 2 are the numbers of ICBM launchers that we associate with the Interim Agreement. The numbers in parentheses indicate the US estimate of new USSR silos under construction on the date the Agreement was signed.

COMPARISON OF US AND USSR ICBMs



The Interim Agreement establishes limitations on the deployment of strategic forces by both the US and USSR. Both parties are limited to a relatively large, but unequal, number of fixed land-based and submarine-launched strategic offensive ballistic missile launchers. With but one important exception (i.e., the size of ICBM silos), the Interim Agreement places no significant constraints on the qualitative characteristics of the missiles or the launchers. Moreover, it is also important to recall that the agreement places no limitation on other types of strategic offensive weapons (e.g., long-range bombers, cruise missiles, and air- and sea-based mobile launchers—other than on submarines).

Under the Interim Agreement, ICBM launchers are classified by age and by size. The year 1964 divides launchers for modern ICBMs from "older" types

deployed prior to that date (e.g., SS-7, SS-8, and TITAN II). There is no agreement on a general definition of "heavy," but a unilateral US statement provides that a "heavy" ICBM is an ICBM having a volume significantly greater than that of the largest "light" ICBM operational on either side at the time the Interim Agreement was signed. Therefore, under this definition the SS-11, SS-13, and MINUTEMAN are "light" ICBMs. No additional fixed, land-based ICBM launchers may be constructed by either party after the freeze date of July 1, 1972; but modernization and replacement may be undertaken.

The Agreement prohibits converting any of the "older" or "light" launchers into launchers for modern "heavy" ICBMs, but SLBM launchers may be substituted for the "older" launchers, if desired. Under the terms of the Agreement, therefore, the US could "modernize" all of its 1000 MINUTEMAN and its 54 TITAN II launchers to MINUTEMAN III or any other modern "light" ICBM; but it could not replace any of the TITAN II or MINUTEMAN launchers with modern "heavy" ICBMs. Similarly, the USSR could "modernize" all of its ICBMs, but only the 313 SS-9 associated launchers (288 operational SS-9s and 25 new silos under construction in SS-9 complexes at the time the Agreement was signed) can be converted to new "heavy" ICBMs.

All of the 1030 SS-11 and SS-13 launchers, operational at the time the Agreement was signed, may be modernized for new "light" ICBMs. New "light" ICBMs also may be installed in the 66 new silos, under construction at the time of the Agreement, provided the dimensions of the launcher are not increased by more than 10-15 percent. As I already have mentioned, the 209 "older" SS-7 and SS-8 launchers (and 54 US TITAN II launchers) may be replaced by SLBM launchers.

These "older" SS-7s and SS-8s, deployed in both hard and soft sites, are the first Soviet ICBMs shown on Chart 2. We believe that the Soviet Union will substitute SLBM launchers, under the terms of the Interim Agreement, for some or all of these launchers. Before this is done, we consider that we should receive timely notification through the Standing Consultative Commission.

The SS-9 is a very large ICBM with four different versions. The SS-9 MOD 2 has a single reentry vehicle (RV) with the largest yield of any known ICBM and constitutes the bulk of the SS-9 force. The MOD 1 also has a single RV with a slightly smaller yield; however, only a relatively small number has been deployed. These two missiles are the only operational Soviet ICBMs with the combination of yield and accuracy needed to attack hard targets effectively, but there are insufficient numbers of these missiles deployed to constitute a significant threat to our total MINUTEMAN force.

The enigmatic SS-9 MOD 3 has been tested both in a depressed trajectory mode and as a Fractional Orbital Bombardment System (FOBS). The last test was over two years ago, and there is still substantial question as to its exact capabilities, mission, and extent of operational deployment. We do not believe the MOD 3 has been deployed at any of the regular SS-9 complexes.

The MOD 4 has received more attention in recent years than any other version of the SS-9 because it has provided us with the clearest indication of the Soviet Union's determination to develop MIRV's. Two years ago I reported on the abrupt termination of MOD 4 testing as follows:

"No further flight-tests of the SS-9 MOD 4 have been noted since November 1970. If the Soviets were indeed trying to develop a MIRV system, which I believe is the most plausible explanation for the MOD 4 development program, the project has either been sent back to the drawing boards or abandoned as such."

In January of last year, 26 months after testing had stopped, a new MOD 4 test was detected. The three RVs carried were of a much different design and were equipped with parachutes to insure a soft landing and recovery. More R&D tests of the MOD 4 were carried out in 1973, and some improvement in targeting flexibility has been noted. But in view of the progress made on the improved "heavy" ICBM, the SS-X-18, it remains questionable whether the USSR will develop the MOD 4 into a MIRV system. It could be deployed, of course, on a very limited basis as an MRV rather than a MIRV.

Soviet military planners probably view the SS-11 as their counterpart to our MINUTEMAN. The SS-11 has a slightly higher yield, but is considerably less accurate, than the MINUTEMAN. Comparable numbers of SS-11s also have been deployed.

Three versions of the SS-11 have been tested but only the MOD 1 and MOD 3 have been deployed. Our evidence indicates that the MOD 2 program probably has been terminated. Neither the single RV MOD 1 or the MRV MOD 3 has the

proper combination of yield and accuracy to threaten MINUTEMAN or to be effective against other hard targets.

The SS-11 MOD 1 has been operational since 1966. In addition to its inter-continental mission, the MOD 1 also has been tested at a reduced range. This supports the belief that the SS-11 also could be used for peripheral attack missions against China and Europe.

Extensive testing of the MRV version of the SS-11 has been conducted since 1969. This test program has been very successful for the USSR. We believe that probably the MOD 3 initially was developed to facilitate penetration of ABM defenses by multiplying the number of warheads to be dealt with by a defender. Despite the severe restrictions on ABM defenses imposed by the ABM Treaty, the USSR is deploying rapidly the SS-11 MOD 3. Therefore, it must see advantages in utilizing the MOD 3 against undefended targets, as well as defended ones—probably because of greater targeting flexibility and accuracy.

The last Soviet missile shown on Chart 2 is the SS-13—the only solid fuel ICBM in the operational inventory. Only 60 SS-13 launchers have been deployed.

As I have already indicated, all of our MINUTEMAN Is will have been phased out by mid-1975. At that time, our ICBM force will consist of 550 MINUTEMAN IIIs, 450 MINUTEMAN IIs, and 54 TITAN IIs.

We do not have sufficient information, as yet, on the four new USSR ICBMs being tested to provide physical comparisons of them, similar to those shown on Chart 2 for currently deployed ICBMs. We do have estimates of some of the important characteristics, as you will note from Chart 3.

CHART No. 3

NEW U.S.S.R. ICBM's

	SS-X-16	SS-X-17	SS-X-18	SS-X-19
Follow-on.....	SS-13	SS-11	SS-9	SS-11
Range (nautical miles).....	Over 5,000	Over 5,500	Over 5,500	Over 5,500.
MIRV warhead.....	Probable	Yes	Yes	Yes.
Estimated number of MIRV's.....	(1)	4	5-8	4-6.
Digital computer.....	Yes	Yes	Yes	Yes.
IOC.....	1975	1975	1975	1975.

1 Unknown.

The SS-X-18 now being tested at Tyuratam is a large, two-stage liquid propellant ICBM. It probably is intended as a follow-on to the SS-9. The most significant new characteristic of the SS-X-18 is the addition of a bus-type MIRV system with an on-board digital computer. This new post-boost vehicle (PBV) is similar to the one employed in our Minuteman III and Poseidon. We believe the SS-X-18s probably will have the capability of dispensing five to eight independently targeted warheads. Increased accuracy is a definite goal of the new test program. Finally, we cannot rule out a single RV option for the SS-X-18. Recent tests have employed a single RV, thus indicating a continuing interest in a large warhead with greater accuracy.

As you can see from Chart 3, the SS-X-17 and SS-X-19 are both considered follow-on missiles to the SS-11. Since these are very extensive test programs for expensive systems, they may be competing designs, with only one to be chosen for ultimate deployment as a follow-on to the SS-11. We believe that a similar competitive design and flight test program was employed prior to the decision to deploy the SS-9. It would be premature at this time, however, to rule out the possibility that both may become operational. Both systems have on-board computers and have been tested with MIRV warheads. We estimate that one or both of these systems could be deployed in 1975.

The SS-X-16 is the only new solid propellant ICBM being tested by the USSR and is a logical successor to replace the 60 SS-13s in silos. The SS-X-16 is about the same size as the SS-13, but has greater range and payload capability. We have no direct evidence that the SS-X-16 will be deployed in a mobile mode; however, indications suggest that the Soviet Union is developing the SS-X-16 with the option of deploying it as a land-based mobile ICBM.

As you know, the United States unilaterally has stated that it would consider the deployment of operational land-mobile ICBM launchers during the period of the Interim Agreement as inconsistent with the Strategic Arms Limitation objectives, even though the USSR would not agree to restricting deployment of

mobile ICBMs. Development and testing, however, of a land-mobile ICBM system are not prohibited.

So far, the SS-X-16 has been tested only with a single RV. Nonetheless, there are indications that the USSR plans to develop a MIRV payload for the SS-X-16 similar to the other three new ICBMs. Either version could be ready for deployment in 1975, but if a MIRV version is planned for this time frame, a high priority testing program would have to be instituted soon.

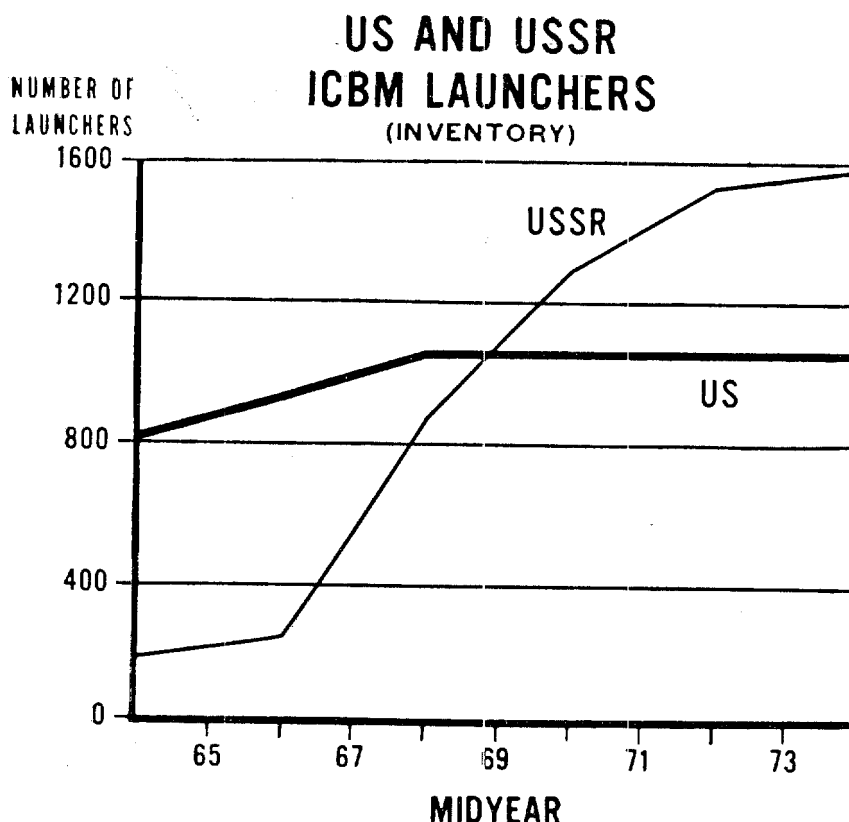


CHART No. 4

Shown on Chart 4 are the latest projections of US and USSR ICBM forces, assuming the limitations incorporated in the Interim Agreement remain in effect. This is the first of the quantitative charts that I initially developed for this presentation four years ago. As I repeatedly have noted, there is a degree of personal professional judgment included in these assessments; however, in an effort to provide you with all the information available, it would seem appropriate to note that our estimates of Soviet strategic growth over the past four years have been on the conservative side.

We estimate that the USSR, at mid-1973, had a total of 1547 operational ICBM launchers—1527 at the time of the Interim Agreement in 1972, plus 20 SS-11 MOD 3s now operational in new small silos. The remaining new silos probably will be operational by mid-1974, giving the USSR, at that time, a total of 1587—only 81 short of the estimated SAL ceiling. By mid-1975, the new large silos are estimated to become operational with the SS-X-18 missile system.

Considering all available evidence, it is our best estimate that the Soviet ICBM force over the next five years will be closer to the lower Interim Agreement limit of 1409 ICBMs than to the upper maximum limit of 1618. (1409 ICBMs is the limit if all of the "older" ICBMs are replaced by SLBMs.) This is based on our

belief that the USSR will exercise its option to replace the older, less effective ICBMs with modern SLBMs. We also believe the remaining ICBMs will be modernized by replacing them with the new systems already described.

US and USSR SLBM forces

Chart 5 provides a comparison of US and USSR SLBMs, all of which are operational except the TRIDENT C-4. The C-4 SLBM is included because of its major importance to the military balance in the years ahead. The C-4 will have a range capability approximately double that of the POSEIDON. The final design characteristics, of course, cannot be confirmed until the development process is completed and the missile is tested. Nevertheless, it will reflect significant technical and operational advances over the POSEIDON. The initial operational capability (IOC) of the new missile will coincide with the completion of the first TRIDENT submarine in late 1978.

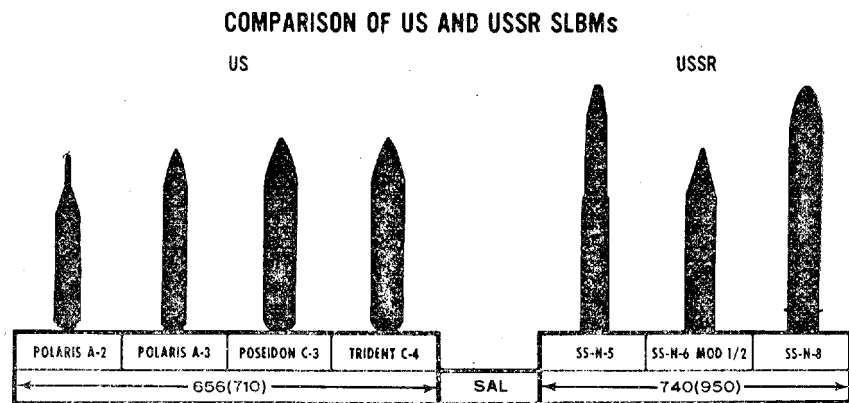


CHART No. 5

The TRIDENT C-4 missile also will be compatible with the POSEIDON submarine. Backfit of this advanced SLBM can be accomplished during little more than a normal tender (repair ship) availability period for the POSEIDON submarine. Plans are made to backfit TRIDENT C-4 missiles in POSEIDON submarines with an IOC for the first backfit in FY 1979.

It already has been noted that the current POLARIS/POSEIDON conversion program of 31 submarines will be completed in FY 1977. This will leave 10 POLARIS A-3 submarines with 160 SLBMs and 31 POSEIDON submarines with 496 SLBMs, for a total of 41 SSBNs with 656 SLBMs in the force. We cannot exceed this number of SLBMs under the Interim Agreement without exercising the option to replace our TITAN II with "modern" SLBMs. Under this option, we could have as many as 710 "modern" SLBM launchers on 44 "modern ballistic missile submarines."

Full funding for the first TRIDENT submarine and advanced procurement funding for the second TRIDENT submarine were appropriated last year. Completed funding for the second and third, plus advance funding for four more TRIDENT submarines, in a 10-ship program, is being requested for FY 1975. Since this new system will be discussed, in detail, by other Defense witnesses, I will not pursue the matter further, except to say that the TRIDENT submarine, like the C-4 SLBM, will represent major technological and operational advances over our POSEIDON submarine. I urge your continued support for this essential program.

Turning to the SLBMs of the Soviet Union, the SS-N-8, which I indicated last year was soon to become operational, now has been deployed on at least three DELTA-class submarines. It has the longest range (4200 nm) of any operational SLBM. This extra range is significant when compared to the range of the SS-N-6 (1300 nm), because it greatly enlarges the ocean space available for patrol while remaining within range of the United States. As a result, both our SLBM launch detection and antisubmarine warfare (ASW) search problems are magnified. In addition, there is tenuous evidence indicating that some DELTA submarines now under construction are being lengthened. Should this extra length

be used to accommodate additional SLBMs, a slightly modified DELTA, equipped with more than the standard 12 SLBMs, may be in production.

The Interim Agreement limits the number of SLBM launchers and "modern ballistic missile submarines" to the numbers "operational and under construction" at the time the Agreement was signed. Additional SLBMs may become operational only as replacements for "older" ICBMs (e.g., SS-7s and SS-8s) or for SLBM launchers on older nuclear-powered submarines. By Protocol, a negotiated "operational and under construction" baseline for the Soviet Union of 740 "ballistic missile launchers on nuclear-powered" submarines was accepted. The Protocol also provides a ceiling for the USSR of 950 modern SLBMs and 62 modern ballistic missile submarines in the event the replacement options are exercised. In any event, we estimate that modern ballistic missile submarines will continue to be produced by the USSR at a rate of five to seven units a year for the next few years.

There are indications that the Soviet Union already has embarked on a program to modernize the YANKIEE-class submarines—first deployed in 1968. In addition, as already indicated, a new longer-range MRV variant of the SS-N-6 is nearing operational status and may be deployed aboard YANKIEE-class submarines.

US AND USSR SLBM LAUNCHERS (INVENTORY)

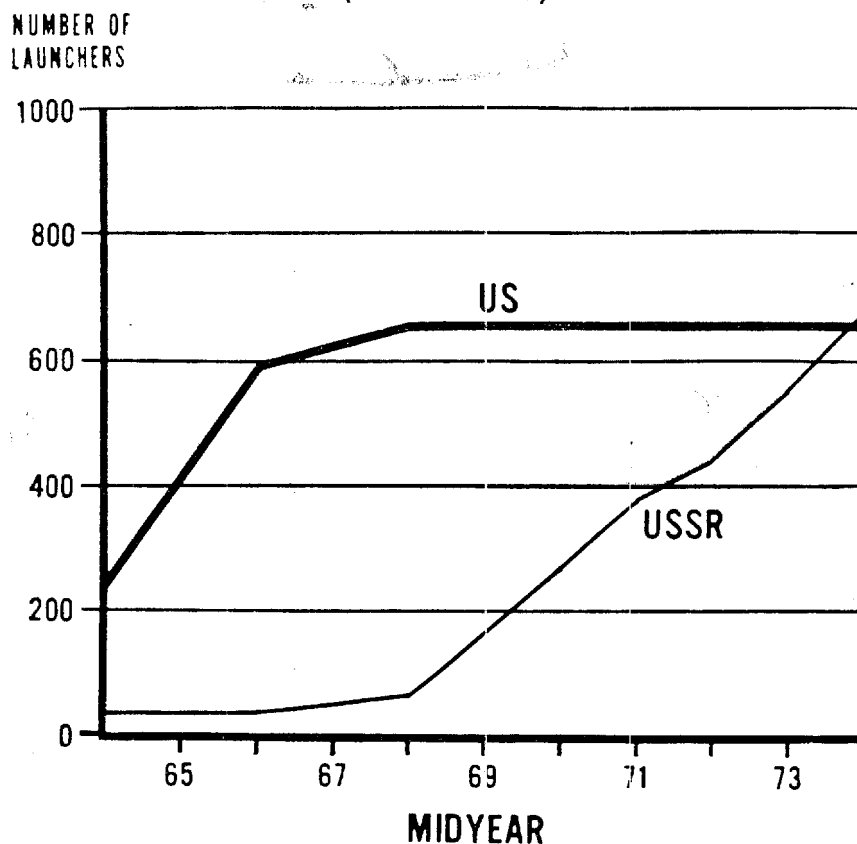


CHART No. 6

The latest projections of US and USSR SLBM launchers are shown on Chart 6. We estimate that the USSR, by mid-1974, will have a total of 666 SLBM launchers, excluding the 60 on 20 GOLF-class submarines. These 60 launchers have been excluded from the USSR strategic forces projections after mid-1972 since they are not considered "strategic missile forces" under the terms of the Interim Agreement. Instead, they are included in the Soviet "theater nuclear forces" after that date.

US and USSR strategic bomber forces

Shown on Chart 7 are the US and USSR strategic bomber forces projected through mid-1974. In each of my past three Military Posture statements, I have reported to you on the progressive development of a new variable-geometry wing, supersonic bomber by the Soviet Union.

US AND USSR INTERCONTINENTAL BOMBERS

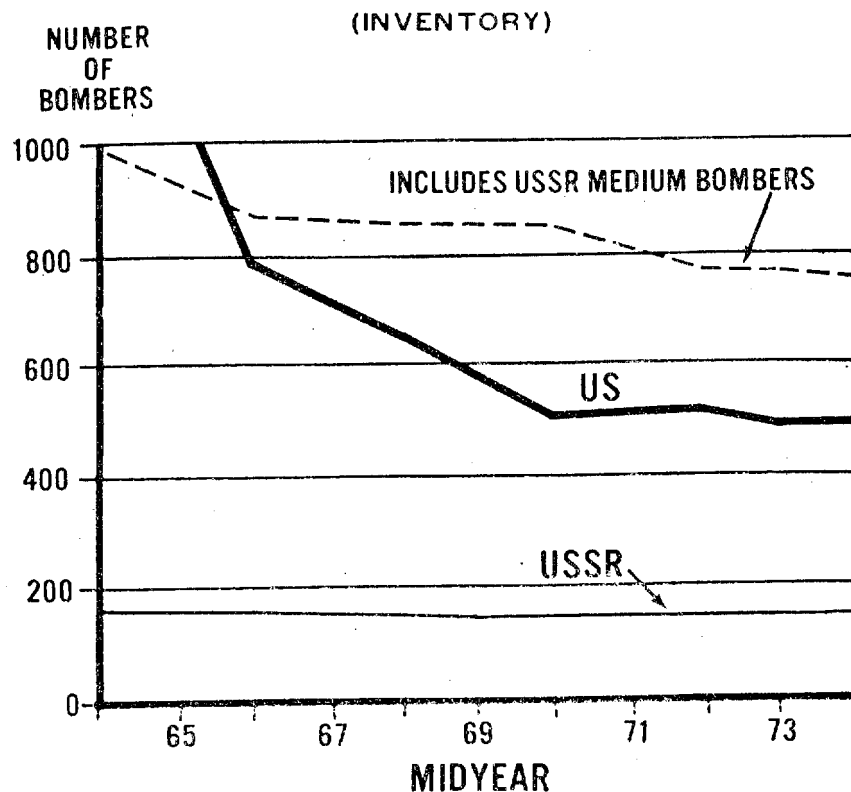


CHART No. 7

Throughout the development of this new BACKFIRE bomber, there has been some uncertainty over its primary mission. The reason for this uncertainty stems from its design and flight characteristics, which place it in between our FB-111 and B-1. In comparison with US intercontinental bombers, it weighs two and one-half times as much as an FB-111 and is about four-fifths as large as the B-1. Its nonrefueled maximum combat radius is about 3100 nm.

We estimate that the BACKFIRE will be deployed operationally in 1974. Unrefueled, BACKFIRE probably is best suited for a peripheral role. Nevertheless, when deployed with a compatible tanker force, BACKFIRE constitutes a potential threat to the Continental United States. It is expected to replace some of both the current medium and heavy bombers and to be employed on both peripheral and intercontinental missions.

Although the older medium bombers of the USSR probably do not figure prominently in Soviet plans for an attack on North America, some could be used on two-way missions against targets in Canada and Alaska and on one-way missions against other parts of the United States. For this reason, I have projected the total bomber force of the USSR on Chart 7.

In terms of just *intercontinental* bombers, the US now has, and most likely will continue to have, at least into the 1980s, a substantial quantitative lead over the USSR, even after considering the deployment of a portion of the BACKFIRES in an intercontinental role. As I already have noted, funds are included in this year's budget for additional modification of 80 B-52D bombers to insure their continued availability until the B-1 could be capable of entering the force in adequate numbers to allow for B-52D retirement—probably the early 1980s.

The B-1 will begin flight tests late this year. A production decision will be made, after detailed evaluation of the four RDT&E aircraft—probably in late 1976. Under the current planning, the B-1 force could be operational in the early 1980s. The B-1 is the first bomber designed to have both a high pre-launch survivability and a high penetrating capability in a high-threat environment. It also will have a significant stand-off capability for attacking heavily defended targets with the SRAM. On a comparable mission, it is expected to be able to carry significantly more payload than the B-52 and have a much greater penetration capability. We also believe that it will have important qualitative advantages over the BACKFIRE in range, payload, and penetration capabilities. The B-1 represents a major technological advance over the B-52 and the FB-111, and I strongly recommend your continued support for this extremely important program.

Since the B-1 is not expected to enter the US force until the 1980s, the US intercontinental bomber force will continue to be composed of B-52s and FB-111s through the rest of this decade.

US and USSR strategic offensive balance

Four general measures have been used to summarize quantitatively the overall strategic offensive balance between the United States and the Soviet Union. These are: numbers of delivery vehicles, megatons, warheads, and throw-weight/payload. It should be understood, of course, that these measures, either singly or collectively, do not provide a complete comparison. There are a number of other factors, primarily qualitative in nature—such as warning, readiness, command and control, pre-launch survivability, reliability, accuracy, range, and penetration capability—which also must be borne in mind in assessing the strategic balance. These other factors cannot be reduced to a measurable common denominator suitable for graphic presentation. Some of the more significant factors in regard to individual weapons systems already have been discussed in the Report of the Secretary of Defense and in this statement. Other factors will be addressed later in this analysis.

**US AND USSR OPERATIONAL
STRATEGIC OFFENSIVE DELIVERY VEHICLES**
(ICBM LAUNCHERS, SLBM LAUNCHERS, AND INTERCONTINENTAL BOMBERS)

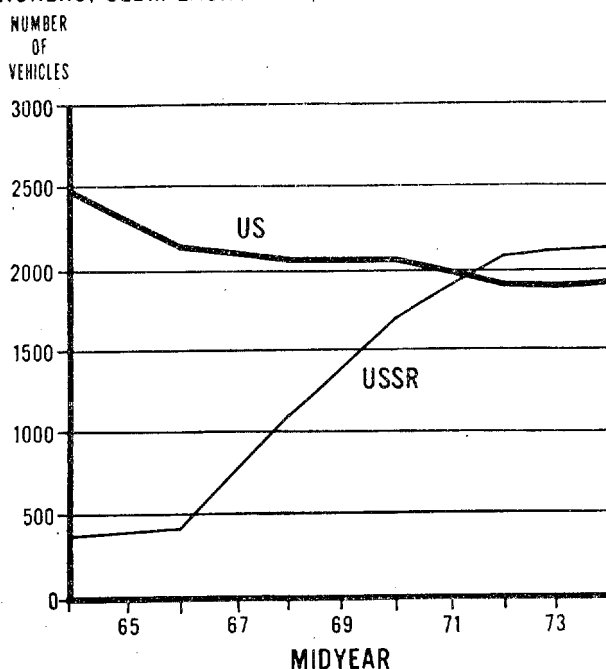


CHART No. 8

The total numbers of operational US and USSR strategic offensive delivery vehicles, projected through mid-1974, are shown on Chart 8. It should be noted that in this chart, only intercontinental bombers are included and only the operational ICBM launchers and the "operational" ballistic missile submarines are counted.

As can be seen on this chart, the USSR has totally eliminated our overwhelming lead in delivery vehicles and now has surpassed us by over 100 operational delivery vehicles. This USSR quantitative advantage over the US is not expected to widen much further over the next five years primarily as a result of SALT constraints. Moreover, the extensive modernization program of the Soviet Union will keep the exact number of operational ICBM launchers and deployable SLBMs in constant flux, but relatively level, as new construction is completed, old launchers are converted, and submarines are overhauled.

Ten years ago, the US had five times the available megatonnage as the USSR. The USSR has taken over the lead in strategic offensive megatons, and now far surpasses us in this measure of the strategic balance. The sharp drop in US

megatons from 1966 to 1970 reflects the reduction in heavy bombers and the substitution of smaller-yield for higher-yield weapons during that period. The decline, thereafter, reflects the substitution of lower-yield MIRVs for higher-yield single RVs in our strategic missiles.

The US is expected to maintain its substantial and significant lead over the USSR in numbers of strategic offensive warheads and bombs. If the USSR pursues a rapid modernization effort, this US advantage could be greatly diminished, but not eliminated, over the next five or six years. On the other hand, if a slow modernization effort is pursued by the USSR, the US lead probably will remain relatively constant and will continue to be very large at least during the next few years.

The USSR has a distinct and demonstrable advantage in missile throw-weight, but the US has a major advantage in bomber payload. The throw-weight advantage of the Soviet Union has been reflected in its large megatonnage lead. As the USSR develops its new family of ICBMs with their larger throw-weight and MIRVs, this increased throw-weight advantage also will be reflected in the number of warheads as well as in large total megatonnage. Thus, the gross advantage in throw-weight gives the USSR the potential eventually to overcome the only remaining quantitative missile lead under these criteria. The US, however, should continue to retain a substantial edge in bomber payload.

Significant US and USSR initiatives—Strategic defensive systems

The US and USSR strategic defensive initiatives are displayed on Chart 9. These ongoing efforts will have far less impact on the strategic balance in the immediate years ahead than the strategic offensive initiatives. In fact, the significance of this chart is more related to what it doesn't show than to what it does. There are several reasons for this apparent restraint on both sides, but the primary limitation is the constraining influence of the ABM Treaty between the US and USSR.

SIGNIFICANT US & USSR INITIATIVES STRATEGIC DEFENSIVE SYSTEMS

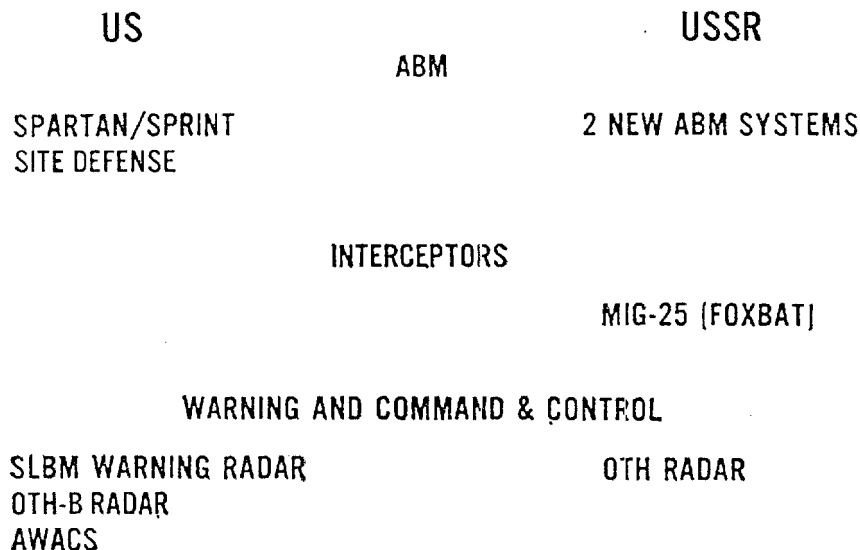


CHART NO 9

The ABM Treaty prohibits a nationwide ABM defense and places strict and substantially equivalent controls on ABM launchers, missiles, and associated radars. Under these limitations, the US currently is proceeding with the deployment of SPARTAN and SPRINT ABM missiles at only one location—Grand Forks, North Dakota—and is continuing research and prototype development of the advanced SITE DEFENSE System. The USSR has an operational GALOSH ABM system around Moscow, with limited capabilities, and is doing research and development work on two new ABM systems.

Turning to air defense, the Soviet Union already has in being an extensive nationwide system employing surveillance, warning, and control systems, a variety of surface-to-air missiles, and a very large interceptor force. The FOXBAT, now designated the MIG-25, adds a major capability to the Soviet air defense force. It is a MACH-3, all weather interceptor and carries a new air-to-air missile. Since the optimum performance of the FOXBAT seems to be at high altitudes, we believe that at least one of its primary roles will be against high-altitude, high-speed attackers, such as air-to-surface missiles.

Although the US has no new strategic interceptors, the introduction of the F-14—being developed for fleet air defense—and the F-15—being developed as an advanced air superiority tactical fighter—will improve significantly the overall air superiority capabilities of US general purpose forces. Either or both of these aircraft also could be employed by strategic air defense units. Similarly, the US austere SAM-D program, which is being developed primarily to provide air defense for the Army in the field in the 1980s, could be effective in a strategic defense role, if so assigned.

The US air defense system, even at its peak, was never comparable in size to the one deployed in the Soviet Union. Based on our overall priorities within a constrained budget, primary emphasis in US air defense is now being placed on surveillance, control of air space, and providing warning of a bomber attack. There are clear risks involved in reducing our capability to limit a potential adversary's ability to employ manned bombers and cruise missiles against the US. However, improvement of US air defense surveillance and control capabilities should, in the future, reduce those risks somewhat, since the limited air defense force assets and available general purpose augmentation forces then could be employed with greater effectiveness.

In the meantime, US initiatives in strategic defense are limited to new technology in early warning and command and control. In addition, we are retaining the options, as mentioned, to convert new general purpose force interceptors and the SAM-D to strategic defense at a later date. Funds for procurement of the first US initiative listed—SLBM Warning Radar—were rejected last year by the Congress because of a belief that "our present warning systems are adequate." A study of these systems has been initiated by the House Appropriations Committee "in order to adequately evaluate future requests of this nature from all the Services." I welcome this study because I have been convinced by several JCS/DOD studies and reviews that our SLBM warning systems are not adequate, particularly in light of the deployment of the Soviet 4200 nm SS-N-8 SLBM.

The Over-the-Horizon Backscatter (OTH-B) radar system is being developed by the US to provide long-range surveillance, detection, and warning of aircraft from the surface to the ionosphere. Although a production decision has not as yet been made, it could be operational by the early 1980s.

AWACS, the last US initiative listed, stands for Airborne Warning and Control System. This system consists of a new all-altitude surveillance radar with associated data processing and command and control equipment installed in a Boeing 707 airframe. By mid-1977, it should provide significantly improved surveillance capabilities with respect to radar detection, active and passive tracking of airborne objects, identification of aircraft, and interceptor control for our tactical and strategic defense air forces.

The USSR is continuing its research and development of over-the-horizon (OTH) radar. Finally, the USSR has a modified transport aircraft, called the MOSS, which has been utilized in airborne warning and control since 1968. No new USSR AWACS-type development has been noted.

US and USSR strategic defensive forces

The GALOSH ABM system deployed around Moscow consists of four complexes; each with two TRY ADD engagement radar sites (one large target tracking radar, and two smaller interceptor tracking and guidance radars, per site),

plus 16 GALOSH missile launchers—for a total of eight TRY ADD radar sites and 64 operational launchers. (The ABM Treaty authorizes the US and the USSR to deploy up to 100 ABM missiles or launchers for the defense of the national capital and 100 more for the defense of an ICBM area.)

Target acquisition and tracking are provided by two large, phased-array DOG HOUSE regional radars near Moscow. In addition, there are large, high-powered, phased-array HEN HOUSE early warning radars deployed around the periphery of the Soviet Union. The deployment of additional early warning radars is not prohibited by the ABM Treaty, provided the radars are deployed along the periphery of the national territory and are oriented outward.

Early in 1971, following a three-year lapse, new construction activity was begun at three previously abandoned ABM complexes near Moscow. Although the ultimate mission for these new facilities is not clear, we still believe the Soviet Union will complete the deployment of the Moscow ABM defenses up to the Treaty limit—six ABM radar complexes and 36 additional ABM launchers. Such deployment is expected to take place during the latter part of this decade. In this regard, Soviet ABM test firings continued during 1973. As already noted, it is postulated that two new systems are under development.

With regard to the US ABM program, we now plan to complete the Grand Forks site with 100 missiles on launchers, a Missile Site Radar, and a Perimeter Acquisition Radar. This site is expected to be operationally ready by mid-1975.

As a hedge against the emergence of new threats which could gravely jeopardize our national safety, we plan to continue the development of the prototype of the SITE DEFENSE system through FY 1975 towards the demonstration in 1977 of an improved capability to defend our MINUTEMAN force in the 1980s. Research also will be continued on new technological approaches to even more advanced ABM systems.

The strategic situation is still fraught with many uncertainties, particularly in light of the ICBM MIRV development of the Soviet Union. It is only prudent, therefore, that we continue our efforts to advance our ABM technology to the full extent permitted by the Treaty and retain the option to deploy a more advanced ABM system for the defense of the National Command Authorities or to deploy a more extensive system should the ABM Treaty be abrogated for any reason.

As previously mentioned, the deployment of the long-range SS-N-8 SLBM has enlarged greatly the ocean areas from which an SLBM attack against the United States can be launched. Some of these areas are beyond the coverage of all of our existing SLBM detection systems. The highly reliable phased-array radar system being requested will provide the long-range detection and tracking capability required to insure adequate warning of an SLBM attack from these remote areas. It also will complement our satellite coverage in other areas. This is required because the satellite is blanked out under certain predictable solar conditions, thus allowing an SLBM to be launched without warning. Additionally, it is essential that the National Command Authorities be provided the highly credible warning data that can be obtained only with detection by more than a single physical phenomenon.

Our current projections of the US air defense force have declined while the USSR air defense forces are essentially the same as those I presented here last year. As a result of budget decisions, primary emphasis is being placed on air-space surveillance and peacetime control and warning of a bomber attack. AWACS development funding has been transferred to General Purpose Forces, although the AWACS still will be required to fulfill strategic, as well as tactical, missions. All existing CONUS strategic air defense surface-to-air missiles (SAMs) will be phased out of operation by the end of FY 1974, although deactivation will not be completed until FY 1975.

All F-102 interceptors will be phased out by mid-1976, but 242 F-106s and 124 F-101s will be retained at least through mid-1976. Pending a review on the retention of the F-101s, this force could be maintained at about that level through the 1970s. As I indicated earlier, in crisis situations general purpose fighters and SAMs could augment CONUS defenses; but, of course, these are the same forces that frequently are deployed elsewhere in a crisis. Thus, the Soviet Union's commanding lead over the United States in numbers of air defense radar sites, command and control facilities, surface-to-air missile launchers, and interceptor aircraft is expected to increase.

The first element of the modernized US air defense warning and control system—the Airborne Warning and Control System (AWACS) aircraft—will become operational in FY 1977. The second element—the Over-the-Horizon Backscatter (OTH-B) radars—could become operational in FY 1980. As I have already noted, the US is retaining the option of utilizing new general purpose force developments, such as the F-14, F-15, and SAM-D, in strategic defense roles, should this become desirable at a later date.

Shown on the right side of Chart 10 are the US and USSR home defense interceptor forces projected through mid-1974. The reductions planned in US interceptor forces already have been noted. The Soviet force, although declining slowly in numbers, is being steadily modernized. By mid-1974, the four newest interceptors—FIREBAR (YAK-28), FIDDLER, FLAGON-A (SU-15), and FOXBAT (MIG-25)—will account for about 50 percent of the force, while the two oldest interceptors—FRESCO (MIG-17) and FARMER (MIG-19)—will account for only 25 percent. The FISHPOT (SU-9/SU-11), introduced in 1959, accounts for the remaining 25 percent. The FLASHLIGHT (YAK-25) was phased out during the past year.

US AND USSR STRATEGIC DEFENSIVE FORCES

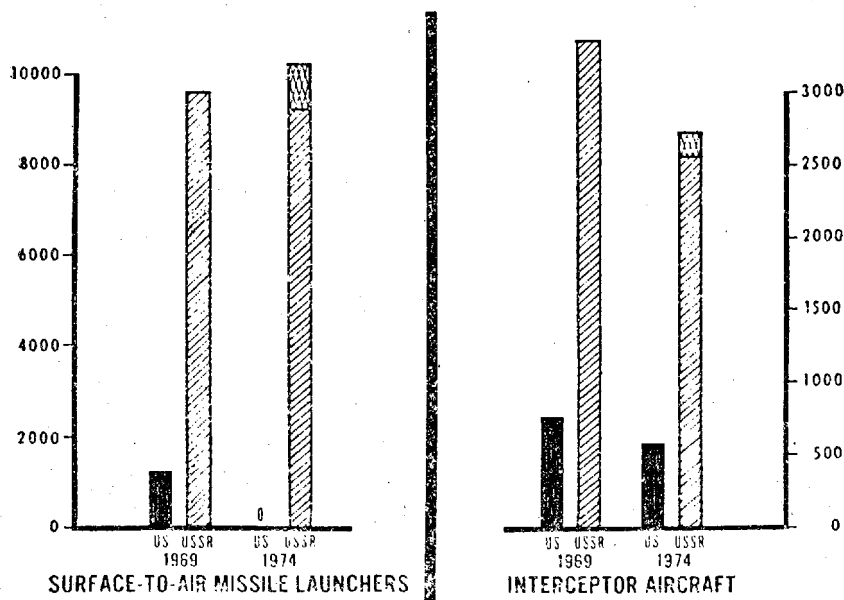


CHART No. 10

By the late 1970s, the Soviet Union may have interceptors with a look-down/shoot-down/radar/missile system, and may deploy a new AWACS with a look-down capability over land, as well as water. Such an interceptor/AWACS force could pose a formidable threat to our bombers. While we have no direct evidence of the existence of either system, we are hedging against this contingency with the development of a strategic cruise missile and electronic countermeasures, should these threats to our retaliatory forces materialize.

Shown on the left side of Chart 10 are the US and USSR home defense Surface-to-Air Missile (SAM) forces. The number of operational US strategic SAM launchers will decline to zero at the end of FY 1974.

There was a slight decrease in the Soviet strategic SAM force during the past year; continued deactivation of SA-2 sites exceeded newly activated SA-3 and SA-5 sites. The SA-3 is a low-altitude system while the SA-5 provides long-range, high-altitude defense.

PRC strategic forces

The strategic offensive programs of the Peoples Republic of China, when compared with the Soviet Union and the United States, represent a relatively small-scale, but well-conceived, effort. The overall strategic offensive capability of the PRC, however, is steadily growing and must be taken seriously even by the super powers. The deliberate, but unhurried, pace of the PRC strategic offensive programs reflects the comparatively small number of technically qualified personnel working on these programs, the relatively limited resources available, and finally, the influence of long-range goals, rather than short-term objectives.

As indicated last year, a substantial expansion of nuclear production facilities is underway in the PRC. For this reason, we estimate that the Chinese stockpile of nuclear weapons will be expanded more rapidly in the years ahead.

Last year, I outlined the four different PRC strategic land-based missile programs and indicated that both an MRBM and an IRBM system may have been deployed. This deployment can now be confirmed. The third system, a limited-range ICBM, is still not believed to be operational; however, it could be deployed later this year. Although capable of reaching deep into the Soviet Union, this missile will not be able to reach the Continental United States (except for the western part of Alaska).

The fourth PRC system, a full-range ICBM, has not progressed as rapidly as we estimated last year. This large missile is in the same class as the US TITAN and the Soviet SS-9. It probably will not be operational until 1976 or 1977.

Forecasting the rate of progress of the PRC SLBM program has proven to be a very difficult task. We believe that the PRC is determined to develop a submarine-launched ballistic missile and a modern ballistic missile submarine; however, estimates of the operational dates for an SLBM and a new submarine have been, in the past, overly optimistic.

The PRC has one Soviet-type GOLF-class diesel-powered missile-launching submarine, which it built during the early 1960s; but to our knowledge, it has never been equipped with missiles. If the PRC is indeed developing an SLBM, it is reasonable to assume that this submarine will be used as the test platform. No other operational PRC ballistic missile submarines are known to us; however, we cannot preclude the possibility that one or more may be under construction. In any event, we believe that it will be at least 1977 before such a system could become operational.

Turning to the strategic defensive forces, we expect the PRC to develop a modern all-weather interceptor during the next few years. As to the PRC surface-to-air defense system, we believe it is capable of providing only a limited point defense of key urban and industrial areas, military installations, and advanced weapons complexes. Although this system has undergone significant upgrading in the past four years, it still has major weaknesses. The PRC has only one operational SAM system, basically a copy of the USSR SA-2 system. We estimate that the PRC, by mid-1973, had deployed several hundred SAM launchers and that this deployment will continue to increase during the next few years.

Overall US and USSR strategic balance

The overall strategic balance between the United States and the Soviet Union is in a state of dynamic equilibrium or in more familiar terms—relative strategic parity. The Soviet Union has, however, generated a momentum in new strategic offensive programs which, in the absence of successful negotiations or increased strategic offensive programs of our own, could easily upset this balance in the future. The USSR holds a significant numerical and throw-weight advantage in missiles, but the US today enjoys an equally significant counterbalance in areas of key qualitative importance—e.g., missile accuracy, MIRVs, submarine quietness, and underwater technology. Deployment of the 4200 nm SS-N-8 has given the USSR a temporary qualitative advantage.

The Soviet Union has developed a new supersonic bomber with intercontinental capabilities, but the United States will continue to retain, for a number of years, a significant advantage in the number of intercontinental bombers and in bomber payload. The US maintains a significant advantage in ABM technology, but the USSR has an operational ABM system and is continuing its research and development on new systems. The Soviet Union has an enormous advantage in air defense, but the US currently maintains the technological and operational capability to penetrate these defenses, should it become necessary to do so.

The advantages in the strategic balance which the United States holds over the Soviet Union are primarily qualitative in nature and are in areas of high technology. For example, our radar technology is still superior to that of the Soviet Union. There are several other areas that could be mentioned, but these technological advantages are transitory at best and are partially offset by the larger warhead yields and missile throw-weight of the USSR. This Soviet throw-weight advantage is a key element because it facilitates the large-scale MIRV development, already underway at a rapid rate.

These examples are illustrative of the US qualitative technological lead over the Soviet Union in areas impacting on the strategic balance. The Interim Agreement does not constrain either the Soviet Union or the United States from pursuing new technology nor does it limit modernization of strategic systems as long as the quantitative restraints are observed and the sizes of the ICBM silo launchers are not increased significantly. The relative military strategic balance is currently in equilibrium, but dynamic and fragile. The essential equivalency necessary to the preservation of peace is, therefore, neither self-perpetuating nor permanent.

It was for this reason that prior to the consideration of the ABM Treaty and Interim Agreement by the Congress, the Joint Chiefs of Staff enumerated the following three assurances which we regard as essential if the United States is to guard against degradation of its national security posture:

Assurance I—"A Broad Range of Intelligence Capabilities and Operations to Verify Soviet Compliance in a Strategic Arms Limitation Environment."

Assurance II—"Aggressive Improvements and Modernization Programs."

Assurance III—"Vigorous Research and Development Programs."

The Joint Chiefs of Staff remain firmly committed to these three Assurances which are supported in the FY 1975 Defense Budget and the supplemental request for FY 1974. Assurances II and III are particularly pertinent to this discussion. If we fail to maintain weapons systems technological superiority or if we fail to maximize our strategic offensive capabilities within the constraints of our international obligations, we will find that the qualitative advantages we now hold will have evaporated and that the United States will be placed in a position of strategic inferiority, thereby risking both peace and freedom.

GENERAL PURPOSE FORCES

The dynamic equilibrium now existing between the United States strategic forces and those of the Soviet Union increases significantly the importance of US general purpose forces (including theater nuclear forces) in the deterrence of conflict below the level of strategic nuclear war. Neither the US nor the USSR will be capable in the foreseeable future of executing a disarming first strike. Under these circumstances, as vital as they are in maintaining an overall deterrent to major conflicts, strategic nuclear forces are less likely today to deter the lesser forms of conflict than in the days of our overwhelming nuclear superiority. Therefore, ready, mobile, and versatile general purpose forces, sufficient to provide a deterrent of their own, must continue to be one of our prime objectives and concerns.

Detente, as we have seen this past year, does not mean the total absence of tension between the US and USSR, nor does the positive improvement in our relations with the Peoples Republic of China mean that the possibility for conflict in Asia has been removed. Economic imbalance, political ambition, social upheaval, resource demands, and military adventurism remain among the potential causes of war. Hopefully, continued diplomatic efforts ultimately will be able to establish a world order capable of settling all disputes through political and legal mechanisms without the use of force or the threat of force. Until that time, the United States and its allies must remain fully prepared to protect and defend our vital interests wherever and whenever threatened by those who would be our adversaries. Our ability to protect these vital interests in military situations, short of strategic nuclear war and particularly at the lower end of the violence spectrum, depends to a great extent on our general purpose forces.

Each of the Service Chiefs will discuss with you in detail those areas of particular concern to his Service. I will provide an overall comparison of United States general purpose forces with those of the Soviet Union and the Peoples Republic of China, with some emphasis on deployments; a brief analysis of the

US, USSR, and PRC land, sea, and air general purpose forces; and a brief discussion of the recent Middle East war with emphasis on important conclusions.

Overview

The Soviet Union maintains an impressive active duty force strength of about four million men, backed up by a trained reserve force of at least another four million men who have served with the active forces in the last five years. There are about twenty million men registered in the ground force reserve alone. Large as it is, the active force of the Soviet Union is not as large as the PRC's active establishment, which has a strength of over four million men and an armed militia of over five million men. By way of comparison, the United States maintains a much smaller active force of about two million, supplemented by about one million individuals in selected reserve units plus others who are individually available for immediate mobilization. There are about three million total US reservists, standby, and retired members. Of course, each of the three nations mentioned could, over time, field a much larger force. These figures simply display the force levels that would be available in the initial stages of a major conflict.

The United States, of course, does not plan to emulate the USSR or PRC in acquiring, training, equipping, and maintaining a peacetime general purpose force of such great size. In gross terms, it costs the United States many times more in one-time investment and in annual incremental costs to recruit, train, and maintain a general purpose force soldier than it costs the USSR. Thus, if the United States were to attempt to compete in terms of numbers with the Soviet Union, it would require far more than the current DOD budget just to maintain equivalent general purpose force levels. Conscription and rigidly controlled economies, of course, are burdens borne by the USSR that appreciably reduce the costs to maintain such large general purpose forces.

These fiscal realities alone, however, do not determine the relative size of the forces. Geopolitical realities also play a major role in determining force requirements. The Soviet Union is a massive heartland astride two continents, at once a European and an Asian nation, contiguous to most of the world's major powers—Western Europe, Japan, China, and the Middle East. The United States, on the other hand, is an insular nation, continental in size, unthreatened by hostile neighbors, and separated from important interests and allies by two oceans. Our general purpose forces reflect this position and perspective.

US and USSR general purpose forces dispositions

The geopolitical factors discussed above also play a major role in the pattern of deployments of the US and USSR. Because of its geography and political goals, the USSR deploys forces, not only for greater internal security, but also as a direct adjunct to its externally deployed forces. Thus, considering location and disposition, the forces along its borders are, in reality, forward-deployed forces projecting global Soviet power. Soviet forces are deployed forward on a massive scale, are offensively designed, and are concerned with controlling buffer states as well as projecting power.

In contrast, our Armed Forces are not located within the United States for internal security reasons, nor are they deployed overseas with any intent to coerce our allies. We seek only to deter potential adversaries across the entire spectrum of conflict as well as to assure our most important allies. If our deterrence and assurances are to be credible, they must be based on clearly evident warfighting capabilities. Basic to this capability is the concept of forward defense. Under this concept, the United States maintains forward-deployed forces and reinforcement capabilities in defense of US and allied interests. Accordingly, certain locations require a US force presence primarily to assure allies of our resolve to honor our commitment or to otherwise support US peacetime political interests. These deployments are small and essentially defensive in nature.

The nine divisions located in the Continental United States include a mix of forces composed of every type US division, including two Marine divisions. Fifty-eight percent of our TACAIR squadrons are maintained in the United States. These are highly mobile forces capable of responding to worldwide contingencies. The concentration of naval forces adjacent to European waters reflects the high priority assigned to the security of this region.

Should deterrence fail in Europe, US forces in conjunction with our NATO allies must be capable of halting the aggression firmly and swiftly. We have a

capability to accomplish this mission today, and it is the recognition of this capability that underpins the initiatives toward detente in Europe. The adverse trend in relative strength between NATO and the Warsaw Pact has been discussed in past statements. We must continue to improve the combat potential of US forces and to urge our allies to modernize and improve the combat readiness of their forces.

The Secretary of Defense has concentrated on the NATO/Warsaw Pact balance. Repetition here of what he has described already would serve no useful purpose. Suffice it to say, deployment of substantial US forces in Europe and the Mediterranean is still required to supplement the forces of our allies more directly in contact with potential adversaries. Significant unilateral reduction of American military presence from the European area would affect adversely the military balance between NATO and the Warsaw Pact, and would affect adversely ongoing attempts to reduce our force levels through MBFR negotiations. A unilateral change of this nature would damage simultaneously the security interests of the United States because, as I indicated last year, I firmly believe that the fate of Western Europe is of vital importance to our own security.

US Asian deployments, which are heavy in naval and air assets, reflect both our commitment to the area and our insistence that our allies continue to provide the manpower necessary for their own defense. It remains a US goal to avoid involvement in any war, but particularly a land war of attrition in Asia.

US general purpose forces are deployed to the Western Pacific to deter aggression and to reassure our allies, particularly Korea and Japan, of our continuing interest and ability to play a major stabilizing role in the area. These forward-deployed forces would be crucial in a major conflict, serve as a deterrent to regional escalation of local confrontations, and demonstrate our resolve to remain a Pacific power and to continue to fulfill our treaty commitments.

Our forces in Asia have been significantly reduced over the past few years as a result of the lower level of conflict in Southeast Asia and the signing, in Paris on January 27, 1973, of the Agreement on Ending the War and Restoring Peace in Vietnam. If we are to avoid a significant impact on our national security, in my opinion, these forces can be reduced substantially only in response to a significant lessening of tensions and conflict in the area. Without such changes in the political and military situation, US military presence in Asia, at approximately current levels, probably will be required for some time to come.

Two factors remain to be examined on the issue of deployments—the special problems associated with the Indian Ocean and sealift and airlift capabilities.

Soviet military and political activities in the Indian Ocean area clearly demonstrate the USSR's continuing pursuit of long-range regional objectives. Before 1968, there was *no* regular Soviet naval presence in the Indian Ocean. The USSR reached an average of 4300 naval ship days per year for 1969-70. By 1973, it had more than doubled that presence; but, in large part, this resulted from the salvage and harbor-clearing operation at Bangladesh. The Soviet Union now operates about nine combatants/submarines and 21 naval auxiliaries in the area and has, during periods of tension, clearly demonstrated a capability to surge and reinforce.

Currently the PRC has little or no capability to project military force into the Indian Ocean area.

The United States has important interests in the area, even beyond the self-evident need for access to oil and mineral resources. We must demonstrate to both allies and would-be adversaries US resolve to deter threats to the vital sea lines of communication in the area and to prevent closure of these lines of communication if deterrence fails. Access to the resources of the region is indispensable to the survival of both NATO and Japan. Therefore, we must be in a position to deter activities that are directed against the interests of the United States or its allies.

If we are to accomplish these objectives, and, at the same time, counter politically the growing Soviet presence in the area, we will be required to expand on a more permanent basis our limited force presence. Some expansion of the communications facility on Diego Garcia is important to our interests in the Near East, South Asia, and the Indian Ocean. We have requested funds to expand the present facility to support the additional ships, aircraft, and attached and embarked personnel needed to implement this moderate increase in US force presence.

No discussion of deployment would be complete without some mention of capabilities to resupply and reinforce.

The Soviets obviously have not placed the same emphasis on the development of heavy military transport as the US. The US C-5A fleet consists of 70 aircraft capable of lifting M-60 tanks, and 234 of the smaller C-141s. We plan to increase the effectiveness of the C-141 aircraft by elongating the fuselage by 30 percent to increase its capability for carrying oversized cargo and additional combat troops.

In regard to sealift, the USSR operates 1,500 merchant ships totalling about 12.5 million deadweight tons. Of this total there are some 370 cargo ships and 112 tankers which appear to be equipped and suitable for long-range military sealift. All are less than 20 years old, are capable of speeds in excess of 14 knots, and have the required heavy lift booms and hatch size. As noted last year, Soviet shipbuilding facilities have been expanded so significantly that they retain the option to double their current capability by 1980.

The United States operates only 239 comparable ships of 3.4 million deadweight tons and 162 tankers which meet similar military supply requirements. The US Navy provides amphibious lift for the assault elements of more than one Marine Corps Division/Wing team (MAF) and plans to operate, by 1978, sufficient lift for one and one-third MAFs. I believe that with sufficient overflight privileges and base rights, the US has the capability to project the necessary military power to control the early critical stage of a confrontation in those areas of the world where our interests come in conflict with those of the USSR. We plan to expand our sealift and airlift forces so as to maintain a credible strategic mobility capability. If we fail to provide this capability, then our potential adversaries will know that they can always pick the point of confrontation and concentrate their forces with impunity.

US general purpose forces readiness

There are two factors affecting future US readiness that are particularly worthy of attention at this time.

First, the all-volunteer force environment will have an increasing impact on our ability to attract and retain that level of expertise required to maintain a satisfactory level of readiness. This impact will be felt most in the technical skill positions. Another facet of this problem is leadership. Unless dedicated young men of good character continue to be attracted to a military career, we soon can expect to possess an Armed Force led by second-raters. The military strength of our Nation rests not on weapons systems alone, but, rather, is embodied in the character, ability, and morale of those entrusted to use them. First-class leaders will be attracted only if the Nation as a whole recognizes the need for such leadership and also actively seeks to create pride in military service.

The second factor adversely impacting on future readiness is the energy problem. We have implemented maximum POL conservation measures and drastically curtailed training missions and exercises. These restraints only now are beginning to be reflected in our readiness posture. We can maintain minimum acceptable readiness under present conditions only for the short term. Continued reductions in routine training and major exercises will result in gradual, but serious, cumulative degradation in the long term. Returning to optimum training levels will be difficult as a result of price increases, even if the fuel becomes available.

Significant US and USSR initiatives—General purpose forces systems

The principal US and USSR general purpose force initiatives are shown on Chart 11. There are other important ongoing programs, of course, which could be listed for both the US and USSR, but these are believed to be the most significant. You should note that nine of the Soviet systems listed have progressed to the point of deployment, while only two of the US systems are in that category. Recognizing that legitimate disagreements may exist over which general purpose systems should be included on this chart, the emphasis displayed by these newly developed Soviet systems clearly illustrates the broad scope of USSR general purpose force modernization. The list also reflects our limited ability to detect research and development on Soviet general purpose force systems.

SIGNIFICANT US & USSR INITIATIVES GENERAL PURPOSE FORCES SYSTEMS

US	GROUND FORCES	USSR
ARMY "BIG FIVE": AAH & UTTAS XM-1 TANK & MICV SAM-D • DRAGON & TOW ANTITANK WEAPONS CH-53E HVY ASSAULT HELO		• NEW MEDIUM TANK • NEW FIGHTING VEHICLE • BROM- MISSILE SYSTEM • HIND A HELO
TACTICAL AIR FORCES		
A-10 CLOSE AIR SUPPORT A C F-15 (EAGLE) FIGHTER EF-111A • F-14 (TOMCAT) FIGHTER		FENCER A VGV FIGHTER BOMBER • MIG-23 (FLOGGER) FIGHTER • SU-20 GROUND SUPPORT A C V STOL FIGHTER
NAVAL FORCES		
688 CLASS ATTACK SUB LHA AMPHIB ASSAULT SHIP SEA CONTROL SHIP PATROL FRIGATE [HARPOON EQUIPPED]		KURIL CLASS CARRIER • KARA CLASS CRUISER • KRIVAK CLASS DESTROYER • AMGA CLASS MISSILE SUPPORT SHIP

• CURRENTLY BEING DEPLOYED; STILL IN PRODUCTION

CHART NO 11

The Soviet Union, despite the clear commitment it is making to the major modernization of its strategic offensive forces, has not neglected general purpose force modernization. New tanks, aircraft, and ships are being developed and deployed, apparently as a long-range, sustained, and deliberate "across the board" modernization.

A new tank, a new armored fighting vehicle, a new missile system mounted on an existing armored vehicle, and a new assault helicopter currently are being deployed with Soviet ground forces. The deployment of a new medium tank, a new fighting vehicle (which is air-droppable, amphibious, and equivalent to a light tank), and an armored missile system is consistent with the reliance placed by the USSR on armored and mechanized equipment. These new weapon systems will provide evolutionary improvements over similar existing equipment, but they should not change materially the overall effectiveness of the ground forces.

There are numerous indicators that the Soviet Union has begun to increase its emphasis on improving the capabilities of its tactical air forces to engage in ground attack missions, particularly in regard to non-nuclear conflict. Convincing evidence of this trend is supplied by the development of the four Soviet aircraft listed on Chart 11.

The FENCER A, for example, is the first modern Soviet fighter to be developed specifically as a fighter-bomber for the ground attack mission. Although the MIG-23 (FLOGGER) is capable of serving as an interceptor, it also has an important ground attack capability. The SU-20 is an improved version of the FITTER B, also with an improved ground attack capability. The V/STOL fighter is expected to serve as the fixed-wing tactical aircraft for deployment in the new Soviet aircraft carrier. In contrast to the evolutionary improvements of the ground forces, these ongoing tactical air initiatives, when fully implemented, will add significant new capabilities to the Soviet Frontal and Naval Aviation forces.

The deployment of the first KURIL-class V/STOL carrier will add a completely new dimension to Soviet naval capabilities. Although not comparable to the multi-purpose US carriers with their varied complement of sophisticated aircraft, this class of ships will free USSR naval forces from their total dependence on shore-based aircraft. With complementary Soviet programs in underway replenishment ships, command and control cruisers, and amphibious ships, this class of ships will further strengthen the increasing capability of Soviet forces to operate worldwide. The other three naval initiatives listed for the USSR also will strengthen this same capability. The KARA-class cruiser and the KRIVAK-class destroyers are heavily armed ships with impressive arrays of antiship and antiair missiles, as well as antisubmarine sensors and weapons. The AMGA-class ships will provide missile support for all classes of ballistic missile submarines thus potentially improving the sustained effectiveness of these submarines when deployed away from the Soviet Union. It is obvious that ships of this size and sophistication are not needed by a navy structured merely for coastal defense.

Turning to the ongoing US initiatives, the emphasis has been placed on major new programs designed to influence our military capabilities in the late 1970s and 1980s. In regard to the US Ground Forces initiatives, the Army "Big Five" weapons systems have been designed to provide major qualitative improvements in combat equipment for use by ground forces that may be on a battlefield in the 1980s. Superior equipment is indispensable for our ground forces because we plan for them to exploit technology rather than depend upon abundant manpower. The DRAGON and TOW constitute a significantly improved family of antitank weapons to provide protection to ground force units. TOW currently is being deployed and DRAGON will be deployed in the near future with our Army ground forces. A request for funds to provide this same capability to Marine Corps ground forces is contained in the FY 1975 Defense Budget. The last item, the CH-53E, is an improved prototype version of the CH-53D helicopter currently deployed in Marine Corps units. It is expected to have the capability to lift over 90 percent of Marine division combat equipment and Marine tactical aircraft without disassembly. No production decisions have been made on any of these initiatives except for the DRAGON and TOW antitank weapons.

The first three initiatives listed under Tactical Air Forces are ongoing Air Force programs. The A-10 is an attack aircraft specifically designed and optimized for the close air support mission—particularly in the role of defeating enemy armor and providing accurate delivery of ordnance in proximity to friendly ground forces. A production decision on this aircraft is being withheld until a fly-off has been completed between the A-10 and the in-service A-7 aircraft. The F-15 (EAGLE) is an advanced tactical fighter being developed for the Air Superiority mission; but it also is expected to have an air-to-ground capability, with accuracies at least as good as those of the A-7D attack aircraft. As an air superiority fighter, it should out-perform any known Soviet fighter aircraft now in service or projected for service in the 1980s. The EF-111A is being developed as a prototype by installing the latest jamming subsystem in the sophisticated F-111A fighter, to provide an important qualitative improvement in the Air Force's manned tactical ECM capability.

The Navy's F-14 (TOMCAT) is the only Tactical Air Forces initiative listed which is currently operational. Designed for both fleet air and fleet area defense, the F-14 should—like the F-15—be superior to any Soviet fighter aircraft through the 1980s. The F-14 also has an excellent air-to-ground attack capability.

None of the US ships listed under the Naval Forces initiatives is currently operational; however, the first 688-class nuclear-powered attack submarine (SSN) and the first LHA amphibious assault ship should be delivered to the fleet in FY 1975. The 688-class SSNs are expected to be generally qualitatively superior to the best Soviet nuclear-powered attack submarines. With the completion of the five ships in the LHA program in FY 1977, the amphibious forces of the Navy should attain the capability of lifting the helicopter and surface assault elements of one and one-third Marine Amphibious Forces and achieve this in modern 20-knot ships.

The last two ships listed, the sea control ship and the HARPOON missile-equipped patrol frigate, are to be key elements in providing sea-based air, antiair, and antisubmarine capabilities to small task groups, underway replenishment groups, amphibious assault groups, and convoys that do not have aircraft carriers in company. Both of these new ships will be austere, but adequately, de-

signed to fulfill this important mission of protecting our sea lines of communication in lesser-air-threat areas, freeing our carriers to employ their capabilities in protecting our sea lines of communication in high-air-threat areas.

Ground forces

Chart 12 provides a comparison of US, USSR, and PRC inventories of selected major ground force weapons and equipment. Accurate comparisons in this area are difficult because our estimates of Soviet and PRC ground force weapons inventories, of necessity, are based to a large extent on evaluations of their force requirements, division structure, and tables of organization and equipment. Also, there are always numerous problems of definition and classification involved in the categorization of weapons and equipment.

CHART No. 12

GROUND FORCES—MAJOR WEAPONS AND EQUIPMENT

[Ratios]

	U.S.S.R./ United States	U.S./PRC
Medium tanks.....	4:1	1:1
APC and fighting vehicles.....	3:2	6:1
Artillery.....	3:1	1:3
Heavy mortars.....	2:1	1:2
Antitank weapons.....	(1)	(1)
Helicopters.....	1:5	20:1

¹ See text.

Soviet doctrine places great emphasis on the massive use of tanks, armored vehicles, and heavy firepower to win the land battle. Associated with this doctrine, the USSR tends to arm its ground units with large quantities of weapons and equipment, which we have always considered reliable and serviceable, but generally of slightly lower quality than comparable US materiel.

The US has never attempted to match the USSR in quantities of ground force personnel or materiel, but we have taken pride in our superior weapons systems and equipment. The Soviet Union, learning lessons from Vietnam, has continued a very deliberate and effective program, both to modernize its ground force equipment and to place large numbers of sophisticated weapons in its ground force units. The US, because of its involvement in Vietnam, has been required, in recent years, to expend most of its resources maintaining and procuring current models of weapons and equipment.

US technology is still, by and large, superior; but this new Soviet modernization trend, combined with its already massive quantitative superiority, makes it imperative that we continue to modernize our ground forces equipment and continue to pursue those potentially rewarding new areas of technology that might become most useful in the years ahead.

A substantial portion of the Soviet tank force consists of the effective T-62 medium tank, recently employed in combat by Syrian and Egyptian forces in the Middle East. Series production has begun on a new medium tank, the M-1970. The remainder of the Soviet tank force consists of older T-54/55 medium tanks. The PRC is continuing to produce the type 59 tank—a copy of the Soviet T-54.

The US medium tank inventory is less than one-quarter of our estimate of the total USSR inventory, but about the same as the inventory of the PRC. Our main battle tank, the M-60, is comparable to the Soviet T-62. The M-60 series (M-60/A1/A2) now constitutes slightly over half of the US Army inventory. M-60A1s will be delivered to the Marine Corps in June of this year. Over the next three years, M-60A1s will replace all of the old M-48s in both active and reserve Marine Corps units.

An improved version of the M-60A1, to be designated the M-60A3, will have a laser range finder and other improvements over the M-60A1. Also, the 152 mm gun/SHILLFLAGH missile launcher version of the M-60, the M-60A2, will be fielded in Europe in the near future. For the 1980s, the Army is developing a completely new tank, the XM-1. Prototypes to be developed by two competing contractors will be tested (beginning in 1976) before a production decision is made.

The newest Soviet fighting vehicle is the new light, amphibious vehicle, already noted. This relatively small (less than 10 tons) armored vehicle is probably air-droppable, and we believe that production is continuing.

The PRC inventory of APCs and fighting vehicles is still small in comparison with the US and USSR. The Chinese have been producing their own APCs and light tanks for several years. The design of this equipment, however, while similar to older Soviet tanks and APCs, does reflect some improvements. These vehicles, like the medium tanks, continue to be distributed to operational units at a moderate rate.

The principal US APC, the M-113, was first introduced into the Army in 1959. While this vehicle provides adequate transportation and protection to the infantry squad, unlike the Soviet BMP, it cannot be classified as a fighting vehicle. We, therefore, believe that the BMP is superior to the M-113. Initial testing has begun, however, on a new and improved Mechanized Infantry Combat Vehicle (MICV). This new vehicle is programmed to be a partial replacement for the M-113s in Europe-oriented mechanized battalions. It will have greatly improved fire power, mobility, and troop protection characteristics, as compared with the M-113 series.

The principal amphibious landing vehicle in the US Marine Corps is now the LVTP-7. This vehicle is lighter, faster, and more maneuverable than the LVTP-5, which it has replaced recently in all combat units.

Both the USSR and the PRC, with their much larger ground forces, have about three times the number of US artillery pieces and heavy mortars. Although the PRC has increased its production of artillery in recent years, most of its current inventory still consists of USSR World War II types. Most of the USSR and PRC tube artillery pieces have a greater range capability than their US counterparts, but new US ammunition developments are underway which should close this range gap in the 1970s. Also, our extensive use of self-propelled artillery gives us the advantage in mobility.

Because of the wide variety of antitank weapons—ranging from the US one-shot, throw-away 66 mm Light Antitank Weapon (LAW) and the USSR shoulder-fired reloadable 85 mm grenade launcher (RPG-7), through recoilless rifles and guns, field guns, and guided missiles—I have been unable to find a simple quantitative measure with which to compare the US, USSR, and PRC inventories of these weapons. By and large, I would judge that the US has an overall qualitative advantage over the USSR in antitank weapons, due in large part to our new ground forces family of antitank guided missiles—TOW, DRAGON, and SHILLELAGH. We believe that these weapons are clearly superior to the Soviet SNAPPER, SAGGER, and SWATTER antitank guided missiles. TOW is both ground/vehicle-mounted and helicopter-mounted; DRAGON is man-portable; and SHILLELAGH is tube-fired from the M-60A2 tank and the M-551 reconnaissance vehicle. The Soviet antitank missiles are generally ground/vehicle-mounted. Both the US and the USSR have large numbers of the smaller man-portable antitank weapons. The PRC has thousands of older antitank weapons, mostly of World War II types. In this area, the PRC is distinctly inferior to both the US and the USSR.

Turning to the final item on Chart 12, the US still has far more helicopters dedicated to the ground combat role than the USSR and the PRC combined. Although, we believe US helicopters also are superior in design, the USSR is producing a new assault helicopter, the HIND-A. Deployment of this versatile helicopter will increase significantly the heliborne-assault capability of Soviet ground forces. Other Soviet helicopters are also in production, and we can expect a steady increase in this force over the years.

There are two major new US Army programs, already mentioned, which should improve substantially the US heliborne and helicopter assault capabilities in the 1980s. These are the UTTAS squad assault helicopter and the Advanced Attack Helicopter (AAH). The UTTAS, which is now in the engineering development stage, will be able to carry, even under adverse climatic conditions, an entire Army squad in addition to the crew. It will replace eventually the "Huey" as the mainstay of the Army assault helicopter force. The AAH helicopter will have greatly improved performance and survivability characteristics over the AH-1 COBRA. It will have also an operational capability at night and in adverse weather. In addition, both the Army and the Marine Corps are developing improved versions of the AH-1 COBRA, gunship, which will be capable of firing the TOW missile.

Tactical Air Forces

Shown on Chart 13 are the US, USSR, and PRC tactical aircraft inventories, including fighter, attack, light bomber, and reconnaissance aircraft.

The US figures include all such aircraft, both active and reserve, in the Air Force, Navy, and Marine Corps, but exclude those used for training (about 850 in 1974) and those assigned to and discussed previously under Continental Air Defense (about 500 in 1974).

The Soviet figures similarly exclude tactical-type aircraft used for training (about 2000 in 1974) and fighter aircraft assigned to the PVO Strany (Air Defense of the Nation) forces (about 2500 in 1974). Some of these aircraft could be diverted to the tactical role.

In the PRC, most fighter aircraft are assigned a *strategic* home defense mission (over 3000 in 1974). The PRC figures, therefore, include only the *tactical* aircraft (fighters and light bombers) in the active inventory of the Air Force and Naval Air Force. On the other hand, home defense interceptor units participate in ground support training exercises; and it is believed that many of these strategic home defense aircraft would be utilized, whenever necessary, in a tactical role. No reserve aircraft figures are available for the PRC.

TACTICAL AIRCRAFT

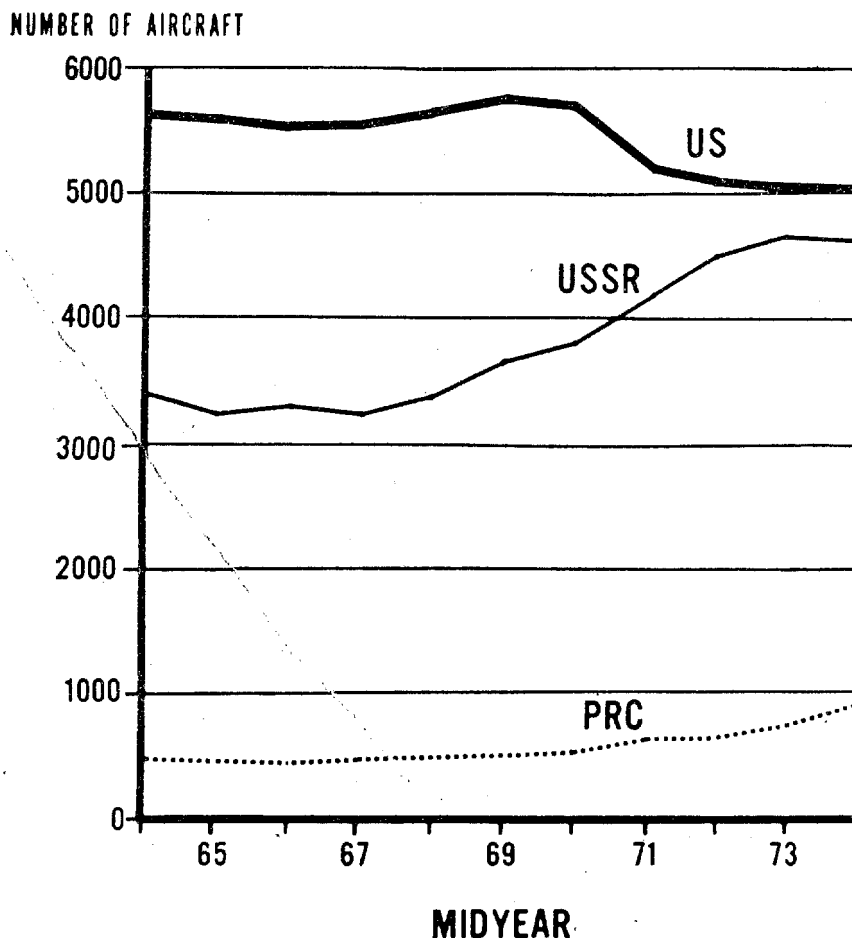


CHART No. 13

The US tactical aircraft inventory will decline slightly over the next few years. The substantial modernization taking place during the next five-year period will partially offset the effect of this decline in total inventory, but the rate of deployment of the new aircraft, e.g., F-14, F-15, and A-10, will not quite equal the attrition and replacement of the older aircraft. As the Secretary of Defense has indicated, the increasing costs associated with sophisticated high-performance aircraft are such that programmed modernization is not as rapid as desired.

In the Air Force, the major changes in the tactical aircraft programmed inventory will result from the introduction of the F-15 (EAGLE) air superiority fighter and the A-10 close air support aircraft. (The A-10 aircraft is an important part of the Air Force program; however, no production decision will be made until after it completes a fly-off with the A-7 and other tests.)

The F-15 (EAGLE) slowly will replace the F-4E as the primary air superiority fighter for the Air Force; and the A-10, under the current program, will phase into the active force beginning FY 1977. The first squadron of F-15s is programmed to be operational in early FY 1976. Some A-7s and F-4s now in the active forces will be transferred to the Reserve Forces to continue this essential part of our total force modernization program.

The criteria for selecting the F-15 (EAGLE) design features were based on providing an air-to-air combat capability superior to that of threat aircraft projected for the 1980's; however, the high thrust-to-weight ratio and low wing loading also provide a capability to carry large external loads. The "hard points" built into the wings and fuselage to carry fuel tanks are compatible with multiple ejector racks for conventional weapons. This aircraft has the sensor, computational, and display systems required for various manual and semi-automatic all-weather ground attack missions. Therefore, the F-15 (EAGLE) also should have an excellent ground attack capability.

The A-10, in contrast to the F-15, has been designed primarily for the close support mission. It is a much less sophisticated and less expensive aircraft than the F-15. The short take-off and landing (STOL) capability of the A-10 will permit it to use short battlefield area airstrips; and its large fuel capacity will provide long loiter time, both of which are important characteristics for a close air support aircraft. In addition to its internal 30 mm Gatling gun, the A-10 has 11 external pylons to carry a large mixed ordnance payload. Its survivability under high intensity battlefield conditions is greatly enhanced by armor installed around the cockpit and other critical components, including: redundant structural components, backup flight controls, and self-sealing foam-filled fuel tanks. The simplicity designed into the A-10 should allow it to be serviced and operated from bases with limited facilities close to the forward edge of the battle area.

In the active Navy, the new F-14A (TOMCAT) is scheduled to replace about half the F-4s. It also will replace four squadrons of F-4s in the active Marine Corps. A-7Es will replace the older versions of the A-7 and A-4 in the active Navy in a primary light attack role; while in the active Marine Corps, this role will continue to be assigned to the A-4 (the improved version, A-4M) and the new AV-8A (HARRIER). The V/STOL capable HARRIER has exceeded expectations in its initial operational service.

The F-14A (TOMCAT) is designed to operate from MIDWAY and larger class carriers, as well as from Marine Corps fields ashore. Initial carrier suitability trials were conducted successfully in June 1972. The first two active Navy squadrons are now operational, and the first active Marine Corps F-14A (TOMCAT) squadron will be operational prior to the end of FY 1975.

One of the most important features of the F-14A (TOMCAT) is its AWG-9 fire control system and the long-range, all-weather, air-to-air PHOENIX missile. This weapons system is capable of simultaneously engaging multiple supersonic targets at ranges out to 60 nm and at altitudes up to 80,000 feet. Intensive testing of this newly operational missile has confirmed its outstanding effectiveness.

The attack capabilities of the Navy A-6 and A-7E and the Marine Corps A-4M aircraft should be improved by new systems under development. The target acquisition and attack multisensor system (TRAMS) will be installed in the A-6

and the A-7E, and the angle rate bombing system (ARBS) will be retrofitted into the A-4M.

The experience gained from Vietnam and again in the recent Middle East conflict has reemphasized the importance of effective electronic warfare systems operating in the modern SAM environment. Continued modernization of our electronic countermeasures (ECM) and electronic support measures (ESM) is essential to our general purpose program. All Military Services are engaged in this effort. Under tactical air forces programs for FY 1975, for example, the Air Force is developing the EF-111A to improve its manned ECM capability. Funds also are being requested to initiate prototype efforts to expand the ECM capabilities of the Navy EA-6B. Other Service ECM programs, both in R&D and in new procurement, also are being pursued.

In the area of command and control, the AWACS, already discussed under its strategic defensive role, also will have a major tactical mission and should greatly increase the effectiveness of all tactical aircraft under its control.

The primary additions to the Soviet tactical air force inventory over the next five years are expected to be the MIG-23 (FLOGGER), FENCER A (a new VGV fighter-bomber), SU-20 (improved FITTER B), and MIG-25 (FOXBAT). All of these aircraft except the FOXBAT, a high-altitude interceptor, have an important ground attack capability. This increased Soviet emphasis on new tactical aircraft has required an upward reevaluation of our total future inventory projections for the next few years.

In contrast to our under-estimation of the future aircraft inventory of the Soviet tactical air forces, our last year's estimate for the growth rate of the PRC tactical air forces was too high. The PRC tactical aircraft inventory still is expected to continue its growth, but not as rapidly as projected last year.

As already indicated, the Soviet Union appears to be making a determined effort to erase the long-held advantage in the ground attack role held by US tactical air forces. On the other hand, the USSR traditionally has emphasized the air superiority capabilities in its tactical aircraft and has gained thereby a clear quantitative advantage and some qualitative advantages in this role. With the deployment of new US and USSR aircraft, these differences will tend to narrow; however, I believe US tactical air forces will be superior in both roles in the 1980s if we actively pursue the tactical aircraft modernization programs already underway—particularly the F-14A (TOMCAT) and the F-15 (EAGLE).

Naval Forces

Shown on Chart 14 is a comparison of the numbers of US, USSR, and PRC major operational combat surface ships. The Soviet force at mid-1974 is expected to consist of approximately two guided missile helicopter ships, 17 missile cruisers, 13 gun cruisers, 43 missile destroyers, 36 gun destroyers, and 104 escorts, for a total of about 215 ships. It is very likely that this force will decrease slightly as the retirement and transfer of older surface ships exceed the deliveries of the more sophisticated and generally heavier new ships.

A substantial Soviet naval modernization program is underway. As already indicated, several new classes of combat surface ships are being constructed in the Soviet Union. Other older classes are undergoing major conversions involving the addition of new missiles, antisubmarine systems, and communications equipment.

The largest Soviet surface combatant ever constructed is the recently launched KURIL-class aircraft carrier. The ship is over 900 feet in length and should displace 30-40,000 tons, when its fitting-out period is completed. The deck configuration and the lack of catapults or arresting gear indicate that this ship apparently is designed to operate V/STOL aircraft and helicopters, rather than more conventional fighter and attack aircraft. It should be capable of carrying 25 V/STOL aircraft or 36 helicopters. It is believed, however, that a mixture of the new V/STOL aircraft, mentioned under New Initiatives, and HORMONE helicopters is the most likely complement. The first ship of this class, with its complement of V/STOL aircraft and helicopters, could join the fleet in late 1975. A second carrier is under construction.

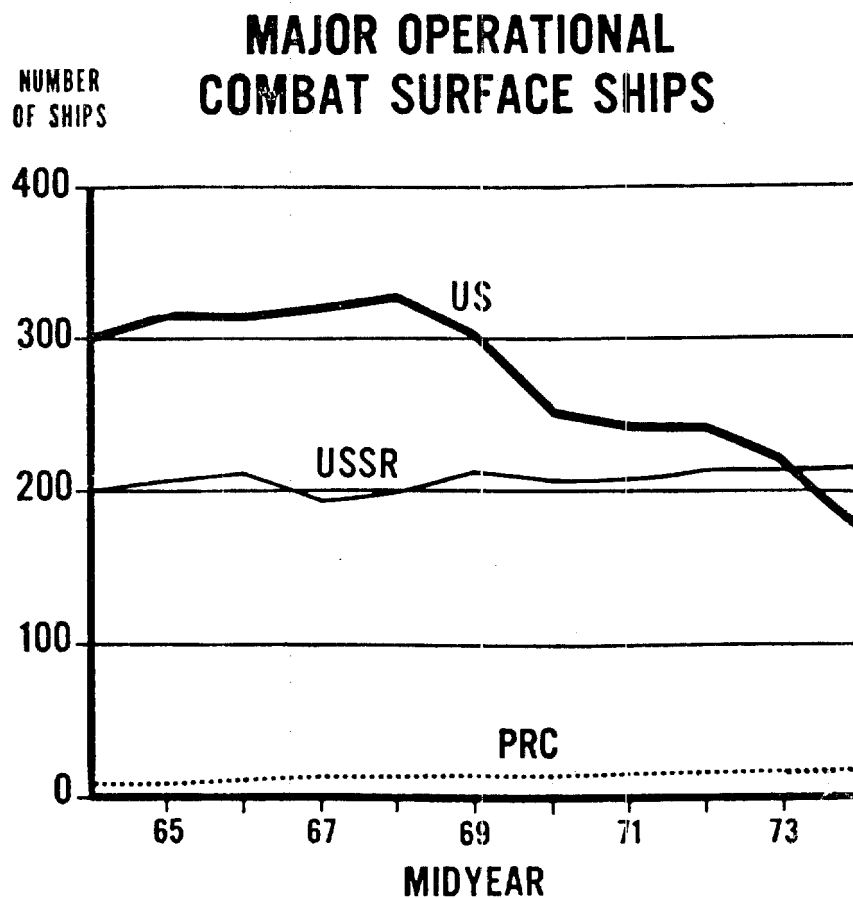


CHART NO. 14

Probably the most heavily armed class of ships in the world for its displacement (about 9000 tons) also is being constructed by the Soviet Union. Two of these KARA-class guided missile light cruisers are already operational and more are expected to join the fleet in the next few years. The KARA-class is the first ship in any navy to be armed with three separate missile systems.

As a result of the high ship construction rates during the 1950s, the Soviet Union—like the United States—faces a growing problem in the 1970s of obsolescence among its gun destroyers and escorts. A substantial portion of these old ships, however, has been, is, or will be modernized to prolong its effective life. The best candidate to replace the older destroyers still is believed to be the KRIVAK-class.

As shown on Chart 14, the PRC major combat surface ship force is quite small, but is growing slowly. A substantial portion of the force is composed of Soviet-designed destroyers and destroyer escorts about 20 years old. Several Chinese-designed missile-equipped surface combatants have been built in the past 10 years and more are under construction.

The largest ships in the PRC fleet are the new guided missile destroyers, the first of which became operational in late 1971. Each ship carries STYX-type missiles, antiaircraft guns, and antisubmarine weapons. More of these ships are expected to be operational by mid-1974, and others are under construction, or fitting out. It appears, however, that major surface combatants are not receiving the same priorities in the PRC Navy that was evident only a few years ago.

In contrast to the slow progress in the construction of major combat surface ships, the PRC is expanding rapidly its guided missile boat force. By mid-1974, it will have over 100 of these small surface combatants; and this number is expected to increase over the next few years. All of these boats are armed with a Chinese version of the highly effective Soviet-designed STYX surface-to-surface missile. This missile boat force significantly enhances the PRC Navy's capability to engage in coastal operations.

The total number of US major combat surface ships (174 for FY 1974) has dropped to the lowest level since prior to the Korean War. This declining trend, however, is being reversed; and for the next few years, new ships are programmed to be delivered faster than the old ships are retired from the active fleet.

During an extended conflict involving the Soviet Union, protection of our sea lines of communication would be a matter of vital importance to our Nation. The last two new ships—the patrol frigate and sea control ship—are essential components of our plan to improve the US capabilities for this complex mission in areas of lesser threat. More sophisticated ships (e.g., aircraft carriers, destroyers, guided missile frigates) still will be required for potentially more intense areas of conflict, but these two new classes of austere ships with their V/STOL aircraft, helicopters, missiles, and ASW systems should be fully capable of providing adequate antiair and antisubmarine protection for small task groups and convoys in less intense areas of conflict.

The HARPOON missile will be the primary surface-to-surface armament for the patrol frigate. This versatile cruise missile weighs about 1400 pounds (1100 pounds for the air-launched versions) and is capable of carrying either a 500-pound nuclear or conventional warhead about 60 nm. The HARPOON already has been flight tested about 30 times with considerable success. It is expected to be operational, both in a surface-to-surface and an air-to-surface version.

The US, USSR, and PRC cruise missile and attack submarines are projected through mid-1974 on Chart 15.

CRUISE MISSILE AND ATTACK SUBMARINES

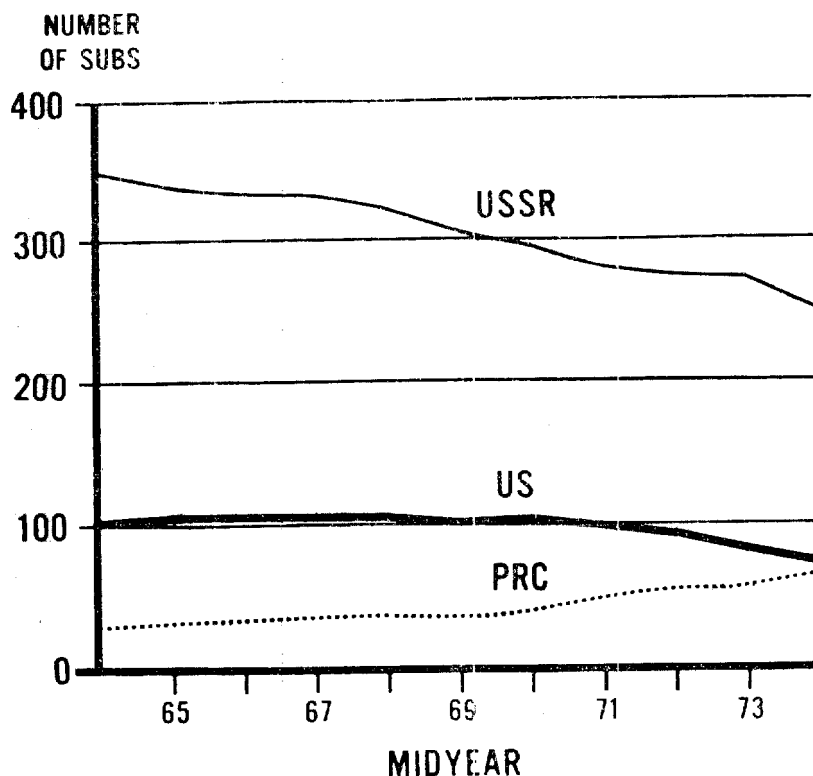


CHART No. 15

The Soviet Union has the largest submarine force in the world. This will continue to be true throughout the next five years. The total number of submarines, however, is expected to decline throughout this period, as the older diesel submarines are phased out faster than the new, more sophisticated submarines are delivered to the fleet. The primary uncertainty relates to the rate of new construction.

Soviet cruise missile submarines have a primary mission against naval surface ships, and a secondary mission (using torpedoes and mines) against other submarines. The CHARIE-class, which has been operational since 1968, is the only operational submarine in any navy capable of launching cruise missiles while submerged.

Over one-half of Soviet submarines are still diesel-powered. No new diesel-powered ballistic or cruise missile submarines have been constructed in recent years, but a new diesel-powered attack submarine is now entering the submarine force. It is believed to satisfy Soviet requirements for a relatively inexpensive non-nuclear replacement for the workhorse submarine, FOXTROT.

Except for one single modern-design, long-range submarine, the PRC submarine force consists primarily of Soviet-designed, but Chinese-built, medium-range WHISKEY- and ROMEO-class submarines. Both of these Soviet classes were considered to be excellent submarines at one time, but they incorporate features which now are considered obsolescent by US and USSR standards. The PRC may have produced a new version of the ROMEO-class. If so, series production of this submarine or possibly even a further improved version could begin in the near future.

After a long period of decline, the total number of US attack submarines will begin to rise again in 1975, as the first 688-class nuclear-powered submarine enters the fleet. The Congress already has approved the construction of 23 of these new submarines through FY 1974, and production is programmed to continue at a rate of two to three per year through 1979. We believe that the 688-class is superior to the best of the USSR attack submarines (i.e., the VICTOR-class) because of its greater quietness and better sonars.

The US does not have any submarine-launched cruise missile (SLCMs) at this time, but research and development has been initiated on an encapsulated version of the HARPON antiship missile, which will be deployed aboard future submarines of the 688-class. Serious consideration is being given to retrofitting the HARPON weapon system in 688-class submarines already under construction. Research also is being carried out on a long-range SLCM (1200-2000 nm range), which may have a tactical version.

The PRC naval forces will continue to be much smaller and much less capable than those of the US and the USSR. Although the Chinese Navy will have a greater capability to project its power beyond the China Seas, it will remain primarily a defensive force at least throughout the rest of this decade.

In evaluating the relative strength of the US and USSR general purpose Navy forces, it is always important, as I have indicated in previous years, to bear in mind their differing primary objectives. Because of our great dependence on overseas sources of raw materials and because of our strong ties to overseas allies, we must insure our access to the seas in both peace and war. Consequently, US Navy general purpose forces have been designed primarily to control the sea lines of communication and to project our military power across the oceans.

The Soviet Union, in contrast, is less dependent on overseas sources of supply and is less involved with overseas allies. Its long-term objective apparently is to weaken our ties with our overseas allies and prevent us from coming to their assistance in time of war. Accordingly, in the past, the Soviet Navy general purpose forces have been designed primarily as a defensive and spoiling force to disrupt our sea lines of communication and to obstruct the projection of our military power across the oceans. Today, a new and more offensively oriented Soviet naval posture is developing. I have pointed out for the past few years that the Soviet Navy is continuing to expand its global reach. The new carriers will add a new capability, which will help to free selected major combat surface ships from total dependence on shore-based aircraft for tactical air support; new and modernized heavily armed carriers and destroyers will strengthen the already formidable combat capabilities of the surface fleets; and new underway replenishment ships will allow the fleets much more freedom of movement in distant ocean areas.

Increased attention to the naval infantry, and modernization of the amphibious lift capability—particularly with the new potential for sea-based tactical air support—also indicate new Soviet interest in projecting its offensive power from the sea.

I do not believe that even with these new ships and added capabilities, the Soviet Union can match US capabilities to project military power from the sea. As I have reported to you for the past few years, however, the increasing Soviet threat to our sea lines of communication from the large and increasingly sophisticated submarine force is of considerable concern. In short, the Soviet naval capabilities are becoming more formidable every year, and we must take note of the increasing readiness with which Soviet naval forces are being deployed to areas of serious international tension. An increase in the size of the fleet, together with vigorous modernization, is necessary in order to insure both the success of our forward deployment strategy and our control of the seas along essential sea lines of communication.

Theater nuclear forces

Our theater nuclear capability is one of the military tools indispensable to successful deterrence and defense. Before discussing specific theater nuclear forces, however, a brief note as to the objectives underlying their deployment seems appropriate. The European theater will be used as an example of the capabilities throughout our general purpose forces.

NATO's doctrine of flexible response, to which the United States subscribes, requires a capability to confront aggression at any level of action across the spectrum of warfare. Should it appear that the aggression cannot be contained and the situation restored by direct conventional defense, the strategy calls for a

carefully controlled, deliberate raising of the scope and intensity of combat. As the threat of a NATO nuclear response becomes progressively more imminent, the costs and risks become disproportionate to the aggressor's objectives.

One escalatory step envisioned by the Alliance is the selective use of tactical nuclear weapons. These weapons have certain inherent advantages in the process of deterrence and control of escalation. First, because of their limited range and yield, they are not a direct threat to the survival of the USSR as a nation. Second, their accuracy allows targeting of military forces with limited collateral damage. Third, many of these weapons are primarily defensive in nature. Barrier plans, demolitions, and SAMs are tools of a defender, not an aggressor. Fourth, the inherent mobility and dispersal capability of these weapons enhance their survivability and reduce the temptation to attempt to destroy them by preemption. A potential adversary is confronted with possible nuclear capability in every artillery position across the entire front. This spread of common delivery means presents the enemy with an extremely difficult targeting problem. Finally, these weapons give the allied command an ability to strike a significant blow to massed enemy forces.

The conventional balance in Europe is such that in the event Warsaw Pact forces are able to mass and apply armored pressure to any given point in the defense line, NATO ability to defend with conventional forces is greatly weakened. The ability to apply limited nuclear firepower under all-weather conditions to the armored point of the thrust greatly contributes to theater deterrence and is an intermediate option between conventional warfare and general nuclear war. These theater nuclear weapons are a quick response to counter the difficult-to-acquire, fleeting, regenerative battlefield targets, the destruction of which is believed essential to a successful defense of Western Europe or any other area of the world where our vital interests are at stake.

In addition to the strategic nuclear forces discussed earlier, both the US and the USSR have large theater nuclear-capable forces. In this regard, the PRC is still far behind the US and the USSR, both qualitatively and quantitatively. While the US and USSR theater nuclear weapons inventories number in the several thousands, the PRC total nuclear weapons inventory (strategic and theater) probably numbers in the few hundreds. As noted earlier, however, the PRC nuclear weapons stockpile is expected to increase rapidly over the next few years, as fissionable material production facilities are expanded.

The US theater nuclear-capable land-based forces include units with tactical aircraft, tactical surface-to-surface missile and rocket launchers, artillery, SAMs, and atomic demolition munitions (ADMs), but no MR/IRBMs or medium bombers. The Soviet theater nuclear-capable land-based forces include MR/IRBM launchers, medium bombers in Long-Range Aviation, light bombers and fighters in tactical air units, and tactical surface-to-surface missile and rocket launchers (and possibly artillery and ADMs) in ground units.

The US theater nuclear-capable naval forces include carrier-based aircraft, SAM launchers on surface ships, and a wide variety of antisubmarine warfare (ASW) weapons, but no cruise missile launchers. The Soviet theater nuclear-capable naval forces include cruise missile launchers on surface ships and submarines, medium bombers in naval aviation units, and possibly ASW weapons, but as yet no carrier-based aircraft.

The PRC theater nuclear-capable forces include MRBM and IRBM launchers, medium and light bombers, and other tactical aircraft. We do not believe the PRC has nuclear-capable weapons for its naval forces at this time.

As I pointed out over the past few years, it is difficult to draw precise conclusions as to the relative balance between the US and the USSR in theater nuclear weapons. This is so because of the uncertainties inherent in estimating Soviet nuclear weapons inventories, as well as the problems involved in evaluating Soviet nuclear weapons technology, now that all testing is conducted underground. Nevertheless, I continue to believe that the US is at least the equal of the USSR in overall capability, and probably still the superior in nuclear weapons technology. The PRC, while still far behind the US and the USSR, is now a significant nuclear power in its region.

I believe a final word is in order concerning the need for modernization of our tactical nuclear stockpile. Since, in many situations, a favorable military balance depends on the qualitative advantages we possess in our weapons systems, technical obsolescence can serve only to degrade the credibility of the US nuclear deterrence in the eyes of both US allies and potential enemies. Today's

technology in warheads and delivery systems can provide an improved theater nuclear stockpile with greater accuracy, modern security devices, and a wider variety of yields. Exploitation of this technology would provide major improvements in response time, flexibility of employment, and a substantial reduction in the unintended collateral damage effects of theater nuclear weapons. This can be done while maintaining or improving the capability to destroy military targets, especially enemy maneuver units in proximity to friendly troops.

The only new theater nuclear warhead or bomb in production now is the warhead for LANCE, which currently is being deployed to Europe, and as I mentioned earlier, will replace HONEST JOHN and SERGEANT for all US units. We also have Congressional approval to build additional B-61 bombs with improved security features. This modern bomb provides our airmen with a versatile weapon compatible with improved aircraft design.

The most important progress in our modernization efforts for tactical nuclear weapons has been realized in the form of advance technology concepts on the part of the AEC laboratories. The Services, working in close concert with the AEC, are insuring that only the more flexible weapon concepts, which provide for efficient use of nuclear materials, shorter response time, lower collateral damage, and enhanced security, are recommended for modernization candidates.

Middle East

No discussion of the relative military posture between the US and USSR would be complete without an analysis of the recent conflict in the Middle East; its genesis, lessons, and consequences in terms of US interests in the area.

Strategically, the Middle East is important because of two major factors—one geographical and the other geological. Geographically, the Middle East is the corridor connecting the Eastern Hemisphere's three major continents. It is the avenue through which a Soviet strategic line of communication to the Far East may be established. The advent of supertankers and intercontinental aircraft may have lessened the area's geographical importance, but certainly has not eliminated it. In addition, the eastern Mediterranean is vital to the defense of NATO's southern flank. Geologically, the primary resource of the Middle East is oil. Middle East oil supplied 13 percent of pre-boycott US demand, 75 percent of Western Europe's, and 85 percent of Japan's. Within the next decade, there is not likely to be significant diminution in the dependence of the industrialized West and Japan on the Middle East. Prior to initiation of the President's Energy Program, projections indicated that the US could require Middle East oil to fulfill over 30 percent of our needs in the 1980s. One-third of the non-Communist world's supply of oil is projected to come from Saudi Arabia and Iran alone.

Superimposed on these strategic considerations is the longstanding political commitment made by both the Congress and the President to the survival of Israel. The credibility of this commitment, like all other US international obligations, depends on the proven past record of performance by the United States, including the performance of our Armed Forces. Further complicating the situation is the fact that the area is the birthplace of three of the world's great religions.

It is against this background that the varied, compound, and interdependent objectives of the United States must be viewed. Peace and stability are our principal national objectives, and defusing the Middle East crisis is central to global security. This point, where the interests of major powers converge, has all the necessary ingredients for being the cockpit for great power confrontation; and yet, there are political and military forces at work well outside the scope of the usual "Communist" and "Free World" interface. The area threatens to be the "Balkans" of the late 20th Century.

Second only to peace is the crucial need to insure access for both the US and her allies to the energy resources of the area. Until substitute energy sources are established, we will remain dependent, in part, upon oil from the Middle East. Also present here is the potential for divisiveness which could damage severely the cohesion of the Atlantic community and US-Japanese relations. The fragmentation of US alliances which could result from the issue is a matter of grave concern. Serious diplomatic efforts to reduce this potential divisiveness continue.

A further US goal remains the denial of hegemony over this strategic area by the Soviet Union or any other power with interests inimical to the United States—ambitions not unknown to Russian history. Domination of the area by

such a power would endanger NATO's southern flank, reduce US mobility, and endanger our lines of communication. It also would sever the economic and military relationships we have so carefully nurtured in the interest of the region's stability, progress, and independence.

On October 6, 1973, the diversity, turmoil, mutual fear, and mistrust, rampant in the region, again passed over the threshold of semi-controlled tension—neither war nor peace—into conflict for the fourth time since Israel's founding. A combined Arab force of over 2000 tanks and 100,000 infantry, engaged an as yet not fully mobilized Israeli force of about 400 tanks and 5000 infantry, simultaneously, in the Sinai and on the Golan Heights. The conflict was violent and costly. The supply and re-equipping of the Arab states by the Soviet Union is estimated to have cost in excess of \$2.6 billion. Efforts to insure an uninterrupted flow of supplies to Israel during the conflict in order to maintain a balance of forces in the area, resulted in US expenditures of about \$1 billion, including airlift operating costs of \$42 million. Congress promptly enacted an Emergency Security Assistance Act providing \$2.2 billion for Israel. When the ceasefire became effective on October 24, 1973, the Israelis held the dominant terrain in the Golan Heights and a sizable new segment of Syrian territory. On the Sinai front, Israel had established a bridgehead across the Suez Canal and nearly surrounded the Egyptian 3d Army of about 25,000 men. The Soviet Union had a naval force of 96 ships, including 29 modern surface combatants and 23 submarines, in the Mediterranean—at their peak strength—a force equal to the total number of such ships operated out of home waters by the USSR worldwide in 1969.

There has been much commentary and repeated analysis of this conflict, a great deal of which would give the impression that a new era of warfare has been entered and that the "lessons learned" are of such significance that new military texts are required. In my view, this impression is unjustified. Time-honored strategic and tactical concepts have been underlined, reinforced, and footnoted—not repealed or replaced. These footnotes to military history are, however, important and worthy of consideration.

First, ready, in-being, deployed forces are essential to maintaining the territorial integrity of any area whose defense is required. The October War presented striking illustrations of two considerations which traditionally have supported this concept. The Israeli Defense Force (IDF) intelligence organization possesses a well-deserved reputation for excellence; yet, the attackers were able to achieve almost complete strategic surprise. They masked their preparations behind a facade of routine exercises, a carefully executed political deception plan, a cloak of secrecy, and good communications security, including extensive secure landline communications.

Military capability has been described as being the product of men, material, and morale, with the result that as any one factor approaches zero—capability approaches zero. This war, like most, was decided primarily by the impact of leadership, ability, and training.

The IDF faced a force with qualitative and quantitative advantages in equipment, quantitative advantages in personnel, and the benefit of tactical surprise. The attacking force executed a thoroughly rehearsed simple plan and gained their initial objectives. However, the IDF ultimately achieved dominant positions on both fronts.

Adaptability and flexibility of leadership were characteristics very apparent in the IDF. The initiative displayed by officers of all ranks was often the key to success. IDF doctrine requires commanders to stay forward to "read the battle." Although the price was high, the advantages gained through decisive leadership at the critical moment made the losses worthwhile. On the other hand, the Egyptians and Syrians were well trained in manning Soviet equipment and executing Soviet tactics.

This conflict reaffirmed that in the last analysis, the success or failure of an investment in national security depends upon the ability to attract to the service of the country (both active and reserve) outstanding young men and women who will rise to positions of military leadership responsibility. There is a difference between leadership and management. Leadership is of the spirit, compounded of personality, vision, and training. Its practice is an art. Management is a science and of the mind. Managers are necessary; leaders are indispensable. We, too, must continue to create and inspire military leaders—junior and senior.

Additionally, the classic doctrine that the priority of employment of air assets must be given to gaining and maintaining air superiority over the battlefield has been proven once again. Today, gaining air superiority includes defeating enemy SAMs in detail. Until enemy air defenses are degraded, any application of aerial firepower will be costly, but the losses will go down as air defenses are taken out. This was made clear during the LINEBACKER II operation in North Vietnam and again during the Middle East War. In the interim, ground forces must be capable of fighting with reduced reliance upon close air support. This can be accomplished by continuing to equip and maintain a balanced, mutually supporting, combined arms team of infantry, artillery, and armor.

The Soviet Union has devoted considerable effort toward development of a SAM and AAA capability, and in both Vietnam and the Middle East, has demonstrated a willingness to deploy SAMs and AAA extensively outside the Soviet Union and Warsaw Pact countries. The surface-to-air arsenal provided to the Arabs includes SA-2, SA-3, SA-6, and SA-7 missile systems; 57 mm, 85 mm, and 100 mm guns with FIRE CAN fire control radar; and ZSU-23-4, ZPU-4, ZPU-1, and 37 mm plus smaller crew-served weapons and individual weapons. In both Egypt and Syria, SAM systems were well forward, with many firing units located within about 50 km of the line of contact. Additionally, massive numbers of SA-7 missiles (both hand-held and possibly mounted on BRDMs) and AAA guns were in the same area. Supporting these weapon systems was a surveillance radar system providing complete overlapping coverage at all altitudes. This defensive belt was both dense and thick. In order to achieve air superiority in the face of such defenses, it is necessary to avoid, suppress, or destroy such systems. ECM and the ability to locate and destroy mobile SAMs must be modern and sophisticated. Standoff weapons can play a major role in this effort. The Air Force is applying special management emphasis to the accelerated development and procurement of systems to suppress air defenses.

On the other side of the coin, we know that a land army can provide initial defense against a modern tactical air attack by extensive employment of mobile, integrated surface-to-air missile systems; but for defense in depth, these ground force weapons must be complemented by air superiority fighters. We are developing, therefore, a program to provide a more mobile, capable, and responsive family of battlefield air defense weapons and are reexamining deployment tactics and the basis for determining surface-to-air launcher levels.

Finally, the lessons and impact of the war with regard to direct US operations should be addressed. Three facets are of particular concern; supply levels and production base, mobility, and operating bases.

The enormous expenditure of missiles, artillery shells, and antitank munitions, together with the level of equipment attrition, demonstrates once again the necessity of maintaining ample stocks of conventional munitions and equipment.

Difficulties experienced as a result of providing moderate quantities of equipment and munitions to Israel have emphasized the magnitude of worldwide deficiencies in the level of arms, munitions, and war material maintained by the United States. These serious shortages of specific types of munitions are compounded by distribution problems and inadequate storage facilities overseas. Critical shortages of equipment and secondary items exist. New requirements from future crises in Southeast Asia, the Middle East, or elsewhere for similar support would further complicate the problem and could degrade significantly our conventional deterrent.

The conflict once again demonstrated that an efficient logistic system is the backbone of any sustained combat capability. If we are to provide our forces with that degree of material readiness sufficient to conduct a conventional defense in NATO or elsewhere and to provide our allies with the ability to defend themselves, we must quickly build up inventory levels for all items of supply and equipment in conjunction with establishing warm production bases for selected high consumption items. We anticipate establishing a CONUS-based stock of munitions and equipment which can be used to support allies under emergency conditions, and improving and enlarging storage facilities for prepositioned war reserve stocks overseas in order to improve short-term response capability and to relieve the immediacy of the demand for airlift/sealift in the event of hostilities.

The Soviet Union again demonstrated its increasing capability to project its influence and military power strategically beyond its contiguous borders. For the first time, this was accomplished by a rapid, continuous airlift coordinated

with an impressive sealift. The threat to the peace of the world has been increased by this newly portrayed capability to introduce and maintain some of the most sophisticated Soviet weapons far outside the land mass of the USSR.

Effective strategic movement of war materials depends upon the complementing capabilities of airlift and sealift. We must retain the capability to respond rapidly with airlift to move personnel and essential supplies and equipment, and to provide sealift capability for the non air-transportable equipment and heavy tonnages required for sustained operations.

US resupply of Israel demonstrated the excellent capabilities of the C-5A and C-141. Over 500 total sorties insured an uninterrupted flow of essential supplies while the conflict continued. Increased numbers of outsized and oversized aircraft are essential if we are to achieve the airlift capabilities necessary to support our NATO commitment and to support the national policy of providing the material necessary for our partners to repel aggression, using their own manpower in their own defense.

Sealift and protection of sea lines of communication are also essential to both contingency and follow-on support operations. The airlift mounted in the Middle East conflict received well-deserved praise. Not so well publicized is the fact that from October 6, 1973, to date, sealift accounted for over 70 percent of the total tonnage moved. In order to reestablish and maintain an effective strategic movement capability, sealift forces must be augmented and modernized as a necessary complement to strategic airlift. This must include maintaining and modernizing sufficient naval escorts and carrier task forces to protect these sealift forces enroute. We also must continue to insure that our naval forces are capable of responding as fully and rapidly as they responded to this crisis.

Finally, the issue of operating bases must be faced. The United States was disappointed, but not surprised, when some of our allies did not perceive their national interests as being identical to ours. Without the cooperation of Portugal, which consented to the use of Lajes, the resupply operation which made Israel's survival possible could not have been conducted without great hazard and almost prohibitive cost. The world has shrunk in political terms, but it is still just as many miles from a US depot in Arkansas to the Middle East as ever. If we are to be able in the future to respond to a call for help of the nature and magnitude of the Israeli operation, we must continue to develop and invest in secure bases, where we can operate as free of foreign political constraints as possible, while still maintaining our alliance system. The best runway, storage facilities, geopolitical location, or deep water port is of little utility if political constraints preclude its use.

Ultimately, the issue is whether the United States can afford to rely solely upon the good faith of others when it is believed that the vital interests of the United States or of one of its allies are in imminent peril. If we are to rely on our ability to respond to conflict as a deterrent, then we must face the consequences of forward-basing US air, ground, and sea forces in areas where our important interests may be altered by military or political compulsions beyond our control. In the long run, assuming we maintain the proper mix of ready, mobile, and versatile general purpose forces, these consequences of forward-basing will pose far fewer dangers for the US than would the withdrawal of these forward-deployed forces.

CONCLUSION

Mr. Chairman, I believe the concerns I have expressed over the aggressive modernization effort being undertaken by the Soviet Union in both strategic and general purpose programs have been fully substantiated. The new capabilities which these programs will provide to the USSR must weigh heavily in any determination of the future plans for our Nation.

The Joint Chiefs of Staff recognize and appreciate the solemn Constitutional obligation placed upon the Members of Congress to personally consider and collectively enact, during the next few months, appropriate legislation to "raise," "support," "provide," and "maintain" Armed Forces for the "common Defence." As your uniformed military advisers, we strongly recommend that you support in full the President's Defense Program and Budget for Fiscal Year 1975 and the supplemental request for Fiscal Year 1974.

STRATEGIC FORCES

The CHAIRMAN. Thank you, Mr. Secretary.

If it is agreeable with the committee, we will have a session this afternoon and give the members a chance to ask questions, as well as give you a chance to further present your problems and describe your requests.

You make a very strong argument regarding strategic forces. You refer to the détente and negotiations with the Soviets. We have before us now the question of how much are we going to build up in the Indian Ocean with the opening of the Suez Canal. I believe you have a \$29 million request in the supplement.

Secretary SCHLESINGER. Yes, sir.

The CHAIRMAN. This seems to me like a very simple question. I think it is certainly all right to mention it in open session. If we are going to have a big buildup over there that would call for another fleet, a great augmentation, at least, of what we have, why couldn't that area be the subject of negotiations or agreements of some kind? I am sure that if we go to building, the Soviets are going to go to building. So is there any chance to reach an agreement through negotiations?

Secretary SCHLESINGER. Yes, sir.

The CHAIRMAN. Will you comment on that, please.

Secretary SCHLESINGER. I think that is an area of possible negotiations with the Soviets. And I think that there are various areas of the world that at least hypothetically could be demilitarized. There will be no need to maintain a fleet in the Indian Ocean unless it is necessary for the stabilization of that area. As a general proposition, Mr. Chairman, we calculate our naval forces on a worldwide basis in accordance with the capabilities of our allies and the capabilities of our potential foes. Where those forces are precisely stationed is perhaps secondary to the issue of what are the sizes of those fleets.

Our purpose in regard to Diego-Garcia is to provide us for the first time with a base in the Indian Ocean—and it will be an austere base, Mr. Chairman—so that we would have a facility if it were necessary for us to move in that area and station forces. The Suez Canal will be reopened, and as far as we can see now, that offers certain prospects.

Mr. Chairman, Admiral Moorer may have an additional word that he would like to say.

The CHAIRMAN. Admiral, do you want to say something?

**STATEMENT OF ADM. THOMAS H. MOORER, U.S.N., CHAIRMAN,
JOINT CHIEFS OF STAFF, ACCOMPANIED BY COL. ROBERT M.
LUCY, U.S.M.C., LEGAL ADVISER AND LEGISLATIVE ASSISTANT
TO THE CHAIRMAN, JCS**

Admiral MOORER. Yes, sir.

Mr. Chairman, as you know, the U.S.S.R. already has use of port facilities at Berbera in Somalia. They continue to operate their forces around Socotra Island. This means that their presence in terms of ships

days has increased significantly, even though the Suez Canal is not open. What we are saying here, as the Secretary emphasized, is that, we feel we need one facility in the Indian Ocean that can be used by our air and naval forces, in transit or for operations in the Indian Ocean, without having to make prior arrangements each time on a case-by-case basis as we do today.

The CHAIRMAN. It is easy to agree with that. My question was, why isn't this a subject of negotiations. Do you favor undertaking such a course?

Admiral MOORER. Sir, I presume you are suggesting that we have an area in the Indian Ocean where no naval operations would take place by either side.

The CHAIRMAN. You could have some kind of a special agreement as to it. It could be tied to the idea of a peaceful use of the Suez Canal and other points. We are just reaching out in the dark looking for something. We are trying to get an agreement on as much as we can. I don't know whether it is practical to try or not. I would think it is.

Admiral MOORER. That has been discussed in the past, as you know, Mr. Chairman. Diego-Garcia was selected because of its geographical location. Even for simply transiting through the Indian Ocean, we feel we require an austere base that we can use without difficulty.

The CHAIRMAN. I raise the question of how far are we going. No one can be certain. I was here during debates on going into NATO, and voted for it. I think it has been the most successful venture since World War II. But at that time later President Truman and then General Eisenhower estimated that we would never need put over one or two divisions in Western Europe. But it has been thrown at me in debate over there many times what he said. But I think we have got to be hardheaded about this matter before we go to setting up over there on a scale beyond what is necessary. We want your opinion as to how much this may grow.

Secretary SCHLESINGER. Mr. Chairman, we do not visualize this as increasing our naval forces. In some respects it may result in some economy with regard to the size of forces, because of a reduction in transit time.

The CHAIRMAN. Your point is that we could better use the forces we already have.

Secretary SCHLESINGER. Yes, sir.

The CHAIRMAN. All right. My real point is, is there any chance to get an agreement to neutralize this area? It seems to me like if there is, it should be pursued now before there is a race between the United States and the Soviets in this particular area of the world. Certainly there is a race on now as to most of it.

Secretary SCHLESINGER. We will discuss that with Dr. Kissinger, Mr. Chairman, as you would be inclined to do, I think.

The CHAIRMAN. I imagine you already have, haven't you?

Secretary SCHLESINGER. Not the particular question that you have raised, Mr. Chairman—whether we should enter into discussions with regard to the neutralization of this area. However, I think that if a Soviet base structure exists in the Western Indian Ocean, we must also be able to operate there from a base much closer than Subic Bay, which is about 4,000 miles away.

The CHAIRMAN. I wouldn't think you would have any trouble in proving to me the need for some structure there. That is not really my inquiry now, although I wouldn't like to be rushed into a supplemental bill. That is a matter for you to justify.

NARWHAL AS SUPPLEMENT TO TRIDENT

This additional submarine that you have mentioned, that is primarily a supplement to Trident, the Narwhal, you called it?

Secretary SCHLESINGER. Yes, sir. We are investigating a new submarine, smaller than the Trident, which will use the Narwhal propulsion principle.

The CHAIRMAN. It is primarily a supplement to Trident?

Secretary SCHLESINGER. That is right. The ultimate composition of our fleet ballistic submarine force will be paced by SALT and by developments by the Soviet Union.

The CHAIRMAN. Will it have the capability of becoming a successor to Trident?

Secretary SCHLESINGER. Yes, sir, it could have that capability, depending on the strategic situation.

The CHAIRMAN. I mean by a successor that you think that there is a possibility now, if we develop this Narwhal, that we wouldn't have to build as many Tridents, is that right?

Secretary SCHLESINGER. I think that that is a possibility, Senator. Once again, we will have to review very carefully what the overall Soviet strategic developments are. The initial Trident program was to replace the 10 Polaris submarines.

The CHAIRMAN. I think that is another program where the committee ought to ask for the most complete proof from a military standpoint and policy standpoint. We got into that Trident matter before I knew it. I supported the hurry-up schedule as a matter of policy. It seems to me like things are quiet enough now to take a little more time in weighing this one.

Secretary SCHLESINGER. We have adjusted our Trident procurement plan, Mr. Chairman. As I believe you have noticed, we are going to build one in the first year, and two in the following years, instead of three per year.

The CHAIRMAN. Fine. You can determine that later.

DETERMINE DIVISION LEVEL

I want to mention just one other thing. I saw General Abrams the other day. He was very much pleased about working out reduction in headquarters and picking up that third of a division.

Secretary SCHLESINGER. A third of a division plus a number of battalions.

The CHAIRMAN. He is the kind of soldier that I described before as having mud on his boots. I was glad to see him happy. I thought that it had been agreed here that we would have 13 divisions. I was expecting the committee to be notified before you went to increasing them. You are planning to go on to 14, you say, by some early date. If we need 14 divisions we made a mistake in reducing to 13.

Secretary SCHLESINGER. I mentioned that in my statement for the record, Mr. Chairman. Because we do not want to have an early recourse to nuclear weapons, it is my judgment that our general purpose forces may have been reduced a bit too much. We recognize how the Congress and the public feel about manpower and resources, and what we want to do is convert the reductions we make in headquarters and support areas into additional combat capability. We have been urged to do so by this committee.

The CHAIRMAN. I think that that is a matter of judgment, and I commend you for going into it. But we would like to go into it with you.

Secretary SCHLESINGER. Yes, sir.

The CHAIRMAN. I think that is a matter of judgment. I commend you for going into it. We would like to go into it with you.

I asked a gentleman, I remember, a few years ago, how many reductions there would be within that 18 divisions, or plus that many, how much it was to be reduced when the fighting stopped in Vietnam. He said one division. That is when I began trying to go into this more and more, because I saw what the Army left alone was going to do. They were going to keep 17 division.

My time is up. I am glad you made this presentation in the way you did.

Secretary SCHLESINGER. Thank you, Mr. Chairman.

The CHAIRMAN. It is refreshing to have it in this form rather than so formal and so much about the threat.

Senator THURMOND, may I call on you now, please, sir.

Senator THURMOND. Dr. Schlesinger, I would like to commend you for a most enlightening statement this morning. I hope the press will see fit to carry as much of that statement as possible.

NUCLEAR DETERRENT

Dr. Schlesinger, as you know, a high administration official, Dr. Fred Ikle, Chief of the U.S. Arms Control and Disarmament Agency, stated recently that the United States should move away from a reliance on land-based missile for nuclear deterrents, and encourage the Soviets to do the same. Would you comment on this remark?

Secretary SCHLESINGER. I think the point that Dr. Ikle was attempting to make was that with the increase of accuracy and throw weight, land-based missiles become more vulnerable in the long run. However, it is my judgment that we must retain a mix of capabilities. Fashions change in this area, Senator Thurmond. It was only a few years ago that it was advocated that we eliminate the bombers and go to ICBM's and SLBM's only. Bombers have become increasingly fashionable, and some recommend that we eliminate the ICBM's and go to bombers and SLBM's only.

The ICBM's provide the possibility of selectivity, careful control, and greater accuracy than we have in the SLBM's. They also provide a substantial contribution to the strategic balance with regard to throw weight.

It would be my judgment—and I can go into this in greater detail in a classified session—that the elimination of our ICBM's would

be an unwise move. I have indicated that we are prepared to be paced by the Soviet Union. If the Soviets are prepared to reduce their strategic forces, we would be prepared to do so, too. But we must have essential equivalence.

Senator THURMOND. Thank you.

VULNERABILITY OF MINUTEMAN

Mr. Secretary, recognizing that the Soviets are testing four new families of intercontinental ballistic missiles and acquiring the MIRV technique, in what timeframe do you feel our Minuteman missiles will be vulnerable to an enemy attack?

Secretary SCHLESINGER. I would not expect that vulnerability to occur until the Soviets had 4 or 5 years after initial deployment of their new missiles to digest the technology and the operational characteristics of those missiles. Consequently, Mr. Chairman, I would think that 1980—1979 at the earliest—would be the point that the Minuteman missile could be vulnerable, and probably a later date than that.

I should also emphasize, Senator Thurmond, that it is all very well—and I cannot stress this too strongly—it is all very well to have paper models of missile exchanges. However, nobody will ever know the real world accuracy of operational targeting from real world silos to real world target sets until such time as there is—and we hope we avoid it—experience in nuclear war. We must fire north, for example. We have never fired north. So in operational practice, there will be an inevitable degradation from the accuracies achieved at the test ranges. And for this reason, Senator Thurmond, I do not believe that either of the great powers can, in the foreseeable future, acquire a high confidence capability against the large number of silos that exist in each of the force structures. Consequently, I do not believe that the counterforce options as described by some are attractive. They may be less preposterous options than attacking cities. But they are not attractive. We must remember this, because there are those who assume, as they build models of missile exchanges, that in fact they do know precisely what those parameters are.

I see Senator McIntyre smiling at this point. Senator McIntyre knows well the existence of technological and operational uncertainties and the impact that they may have operationally.

Happily, we have never had a missile war. Consequently, there would be surprises with regard to the operational details. No one will ever acquire a high confidence capability to go against silos in large numbers.

MUTUAL REDUCTIONS OF LAND-BASED FORCES

Senator THURMOND. Mr. Secretary, in view of Soviet investments and technological advances in the ICBM field, do you think they would agree to follow mutual reductions of such land-based forces?

Secretary SCHLESINGER. I most fervently hope so, and I believe it is reasonable for the Soviets to do that, because, as I have stressed, I believe that we must, as a nation, take the necessary steps to maintain essential equivalence. If the Soviets, with their greater throw weight and throw weight potential, exploit the technologies pres-

ently available to the United States and thereby refrain from balancing down, we would be forced to maintain the balance by increasing our capabilities. It is advantageous for both sides to reduce their throw weight in the future. It is as advantageous, or more so, for the Soviet Union to do so. Consequently, I always hope that the great powers will do what it is reasonable for them to do. I am occasionally disappointed, however.

Senator THURMOND. Mr. Secretary, what steps are we taking to assure that the survivability of our Minuteman missiles is enhanced?

Secretary SCHLESINGER. Senator, the survivability of our land-based forces, as well as our sea-based forces, is something that depends upon the technologies and the reliability developed by a hypothetical foe.

We can harden our silos. We have proceeded to harden the overwhelming majority of those silos. Unless we are constrained by a permanent SALT agreement, we will examine mobility for our land-based ICBM forces as a possible hedge against their destruction.

We shall, of course, continue a technology effort in the ABM area, not because we expect to have to deploy site defense, but because our technological edge, I think, is what helps induce the Soviet Union to agree to the limitation on ABM defenses. And the retention of that technological hedge is a useful way of avoiding any temptation for a race in this area.

SOVIET OBJECTIVES

Senator THURMOND. Mr. Secretary, do the Soviets seem to be building a strategic force for deterrent reasons, or a force that would be a superior force in a nuclear exchange?

Secretary SCHLESINGER. We cannot tell what the Soviet objectives are, and I doubt whether the Soviet Union knows for certain what its specific objectives are.

I think there are conflicting pressures within the Soviet Union, that a large part of the leadership of the Soviet Union embraces détente, and they would like to work out a reasonable balance. I think there also are elements in the Soviet society that are primarily concerned about the national security of the Soviet state, and they would prefer to push on. I think these elements recognize that unless they are up against a nonreacting United States, they cannot obtain superiority. But they have the momentum behind their programs so that if the United States fails to respond, then, indeed, the Soviets would have a measurable superiority in terms of reciprocal counterforce capabilities. In addition, they would have a superiority with regard to the perceived capabilities of both sides. They hope, I presume, that the United States will fail to respond. At best, they want to hedge by having those capabilities available. We do not know what they will do with the potential. Hopefully, they will not use all of that potential.

Senator THURMOND. Thank you, Mr. Secretary. I believe my time has expired.

Secretary SCHLESINGER. Thank you, Senator.

The CHAIRMAN. Senator Symington.

Senator SYMINGTON. Mr. Secretary, I will study your extemporaneous statement. You covered a lot in it that you didn't cover in your prepared statement. I have some thoughts about the subjects that you did cover. I also have some questions, on your prepared statement.

STRATEGIC DOCTRINE

An article by the new head of the Arms Control Agency, in the Foreign Affairs quarterly of January 1973, referred to advancing the targeting proposal you now propose. I thought an article in that publication the following October nullified the logic of this proposal; but in any case, the new strategic doctrine you now advance is a counterforce strategy of directing our strategic missiles against military targets in the Soviet Union, particularly missile silos, through re-targeting, and improved accuracy and yield of warheads.

Of particular concern to those who question this doctrine is that it assumes limited or surgical nuclear war as both acceptable and possible. There would appear nothing new about U.S. missiles being aimed at military targets in the Soviet Union. All tactical or theater nuclear weapons in NATO are targeted on military targets. General Goodpaster confirmed this in his testimony before my Subcommittee of the Joint Committee on Atomic Energy.

A portion of our Minuteman force has always been aimed at military targets.

Let us note that during the debate on the ABM the Defense Department argued that the Minuteman force was vulnerable, and hence had to be protected with defensive missiles. Now the rationale has switched 180 degrees. The Defense officials are saying that neither the United States nor the Soviet Union land-based missiles are vulnerable to a first strike, and hence the possibility of limited strikes at military targets is more likely, and therefore the need now for a counterforce capability.

The accuracy of U.S. warheads is already considered excellent, considered better than that of the Soviet Union. At some point, however, the Soviets could achieve comparable accuracy. Nevertheless, why should the United States encourage the Soviets to spend billions on better accuracy by now announcing that this country plans to develop a counterforce capability?

In my opinion, this plan, which obviously will cost many, many more billions, coordinated with the changes made in the original Kissinger SALT I agreement in Moscow, makes it difficult if not impossible for us to have any success in the planned SALT II talks. Your proposed changes in doctrine may be real, or just so much jargon for the purpose of another bargaining chip at the SALT II talks. (Shades of the multibillion dollar waste on that recent other bargaining chip, now abandoned, the ABM!)

There has been some talk of eliminating Minuteman on both sides. In the first place, one doubts whether it could be negotiable. Second, any such elimination would make our strategic bombers more vulnerable by eliminating the launch time gained by the Soviets firing their land-based missiles at our Minuteman sites.

Another source of serious concern, as we view this gigantic increase request in the defense budget is the rapidly shrinking circle of outside scientists and experts who serve as consultants to the administration on various technical matters. As a result, fewer and fewer outside experts have access to the essential classified material, because it is determined that they do not have a need to know. This development in turn limits the number of people who can intelligently advise Members of Congress, particularly on technical Defense issues.

I consider this a very serious development, one that could, as military technology becomes more complex, lead us farther down the road our Constitution was created to block.

Those are some of my thoughts. I would be glad to have you study my observations and give me a reply. I will study your extemporaneous remarks and ask some questions against it.

Thank you, Mr. Chairman. That is all I have to say at this time.

The CHAIRMAN. Thank you very much, Senator.

Secretary SCHLESINGER. Mr. Chairman, may I make some observations at this time?

The CHAIRMAN. Yes.

Secretary SCHLESINGER. Senator Symington's statement raises a number of issues, some of which I agree with, and some of which I certainly do not necessarily agree with. I am sure that Senator Symington will retain an open mind on those issues, as he always does, as we attempt to lay them out in the weeks ahead.

We are changing our strategic doctrine. We are not necessarily changing our targeting. We are emphasizing selectivity and flexibility. I believe, Senator, if you will confer with many of the people in the Arms Control community, that they, and many of the people you and I know, will approve of the shift in targeting doctrine. Accuracy buttresses that new doctrine, but is not essential to it. Certainly these people prefer that the American President have an option other than killing 85 or 115 million Russians with the consequent return blow. There are very few people that I know in the Arms Control community who do not feel that moving away from this kind of mass destruction as the only established doctrine is a step forward.

In your remarks, Senator, you raised some questions about counterforce. We recognize that land-based missiles will grow increasingly vulnerable. We are not raising a question about that. I stated earlier that neither side can have a high confidence in its capability to destroy a sufficient proportion of those land-based forces so as to preclude the other side from launching a devastating blow with its residual force.

When we speak of counterforce—going against military targets—we are not necessarily referring to silos. We can talk about other military targets, and some of the force will, of course, be directed against soft military targets. And I think that it is generally recognized that there are advantages to holding these kind of targets at risk, as opposed to the massive targeting of cities. We have had an inversion of attitude in the United States in recent years, in that some people, who I think have not thought through the problem, take a moral stance in favor of a declaratory doctrine that emphasizes the killing of 200 million people and the utter elimination of the urban industrial base of at least two societies and probably more.

I recall the reaction on the Hill to our accidental bombing of a Cambodian town last summer, in which 15 civilians or so were killed. The reaction on the Hill, and by some members of the Foreign Relations Committee, was that a strategy that even permitted the accidental death of civilians was an improper strategy. What is the relationship between that point of view and the embracing of a strategy that calls for the automatic death of 170 or 180 million people?

The CHAIRMAN. Senator, you have a couple of minutes here.

Senator SYMINGTON. I would make this observation. As a member of the Joint Atomic Energy Committee I know that you take as a premise a clean bomb; but I don't think there is any supposibility of having a clean nuclear war. The way you put it on a moral basis you would only kill a few million people instead of hundreds of millions of people. I don't understand that at all, any more than I understand why we are building a lot of bombs without the approval of the host countries in Europe to use them, because those countries feel that what would be a tactical war to us would be a strategic war to them.

So I think this matter ought to be threshed out on a technological basis and not on a moral basis. Because there is no way I know—and I have studied it to the best of my ability over the years as a member of the Joint Committee—that you are going to use nuclear weapons without killing a great many people.

Secretary SCHLESINGER. I agree that many people would be killed, Senator. And we recognize the problems with regard to NATO. It is for that reason that we are attempting to shore up the whole NATO structure.

The CHAIRMAN. I am sorry, you have exhausted your time. You may prepare an additional point, if you specially wish to, for the record, Secretary Schlesinger.

[The information follows:]

I agree that we should address this problem on a technological basis—and that is exactly what we are doing. Nevertheless, we should do all we can to reduce the number of civilian casualties and collateral damage involved in a nuclear exchange. Aside from the moral issues involved, the deterrent effect of the theater nuclear posture is weakened if the Soviets believe NATO would not use nuclear weapons against Pact forces on NATO territory because of the collateral damage involved. In addition, the leaders of our NATO allies are placed in an untenable political position if they cannot assure their people that vigorous efforts are being made to reduce the collateral damage which NATO nuclear weapons could cause if used on NATO soil.

SOVIET NAVAL ACTIVITY IN INDIAN OCEAN

The CHAIRMAN. Senator Tower.

Senator TOWER. Mr. Secretary, hasn't the increase in Soviet naval activity in the Indian Ocean been coincident to the 6- or 7-year phase out of British forces from Suez to Hong Kong?

Secretary SCHLESINGER. Yes, sir.

Senator TOWER. In other words, they intended to fill a vacuum that the British left there?

Secretary SCHLESINGER. Yes, sir, the Soviet activity certainly is coincident. Historically, they have moved in at about the same time the British moved out.

Senator TOWER. Are there any British bases in the Indian Ocean now?

Secretary SCHLESINGER. They have an air base at Masira, I believe, and a few vessels going in and out, and the island of Diego Garcia is a British island.

Senator TOWER. Frigates?

Admiral MOORER. And auxiliaries.

Senator TOWER. We don't have anything in there on a continuing basis, do we?

Admiral MOORER. We have the Middle East Force, composed of three ships, operating out of Bahrain.

Senator TOWER. The vicinity of Diego-Garcia is one that is in existence. All we are doing is expanding our capability there.

Secretary SCHLESINGER. Yes, we are extending the air strip and putting in a new storage capability.

Senator TOWER. Would we be proposing to keep special equipment or POL there?

Admiral MOORER. Yes, sir. We would increase somewhat the storage capacity that is already there.

Senator TOWER. Does the Soviet naval presence in the Indian Ocean constitute a threat to free passage through the Malacca Straits?

Admiral MOORER. It could, sir, because the Soviets, of course, have operated down around the Andaman Islands. And the point here is they have acquired access to certain ports, and they have acquired the experience in operations in that area.

They have established a very effective communications station for command and control. So all these things put together simply will enhance their ability to operate naval forces in the Indian Ocean area.

ISRAELI AIRCRAFT LOSSES

Senator TOWER. Switching to another subject, weren't most of the Israeli aircraft losses to SAM-6 fire?

Secretary SCHLESINGER. They were mostly to SAM's and AAA.

Senator TOWER. Their number of losses were actually relatively small in air-to-air combat, were they not?

Secretary SCHLESINGER. They only lost a few aircraft, sir.

Senator TOWER. So does this teach us anything about the need to improve our target penetration capability?

Secretary SCHLESINGER. It does indeed, and that is reflected in our budget request. We are talking about more accurate weapons, such as Maverick, Shrike, and Hobo that I mentioned earlier. These are among the weapons that would reduce the number of sorties required against particular targets through greater accuracy. In addition, we have augmented our defense suppression budget. Defense suppression is one of the things that the Air Force is quite concerned about.

Senator TOWER. So the Israelis are actually confronted with even a more sophisticated aircraft defense than we faced in Vietnam, is that not correct?

Secretary SCHLESINGER. I think more sophisticated in terms of quality, not quantity.

PROGRESS OF ALL-VOLUNTEER ARMY

Senator TOWER. How do you view to date the success of the All-Volunteer force concept? Do you anticipate that it is going to work, or do you think there is some possibility that we might have to reinstate the draft?

Secretary SCHLESINGER. Senator Tower, we cannot guarantee that we be successful with the All-Volunteer force. We have indicated that we will do our best. We are encouraged by the results of the last 2 or 3 months. In the first 5 months, approximately, the Army was getting about 85 percent of its quota. There was a consistency and regularity in those statistics that was distressing to us, although not to the statisticians.

In the last 2 to 3 months, the Army has gotten more than a 100 percent of its quota. Consequently, we are encouraged, and believe that we can make the All-Volunteer force work so long as we get this flow of recruits.

There is always the possibility of having to go back to conscription. It is not a possibility that we are actively examining at the present time.

Senator TOWER. It is not one that you anticipate you would have to go through in the near future?

Secretary SCHLESINGER. No, sir.

Senator TOWER. About how long do you think it will take you to assess the success of the All-Volunteer concept in terms of meeting your requirements?

Secretary SCHLESINGER. I think that we will have to examine this at least for a full year's operation, and perhaps a little bit longer. But by next fall, if we have a clear and visible failure, which I do not expect, we would be able to report to the committee on that.

Senator TOWER. Thank you, Mr. Secretary.

The CHAIRMAN. Thank you, Senator.

Mr. Secretary, let me say that the military must make an all out inexhaustible effort to make the volunteer system work. I don't believe that the American people will favor reenacting the draft, and Congress wouldn't either.

Senator CANNON.

Senator CANNON. Thank you, Mr. Chairman.

GENERAL PURPOSE FORCES

Mr. Secretary, how have we sized our general purpose forces? You talked a lot about the constraints that were imposed by Congress. Have the dollar constraints really been the cause, or what is the basis?

Secretary SCHLESINGER. I think it is a mixture, Senator Cannon, between the general budgetary situation as perceived by the President in submitting his budget, and the views of priorities on the Hill. Most of our money is spent on the general purpose forces. We are spending about 40-50 percent of what we spent in the early sixties on strategic forces. When reductions have had to be made, they have tended to come out of the general purpose forces. In my view, we should attempt

to avoid any situation in which we are forced to have early recourse to nuclear weapons. I believe, therefore, that we should strengthen our general purpose forces, and that they are altogether too thin at the present time.

Senator CANNON. You said on page 4 of your statement that one factor sizing the general purpose forces apparently was contributing to a number of regional balances in Europe and in Asia.

Secretary SCHLESINGER. Yes, sir.

Senator CANNON. What do you believe should be our relative contribution to NATO, for example?

Secretary SCHLESINGER. I cannot be specific about that as a general proposition. I have indicated that I feel that the European countries should do more. We are making at least as sizable a contribution to the ready forces of NATO at the present time as we should be making, and our allies should, in my judgment, be making more. The conventional posture of the Alliance in the southern portion of the Center Region is far better in terms of maintaining the stability of the conventional balance than in the northern portion. At the present time, the northern portion is the responsibility of others. I believe that NATO should do more to strengthen the northern portion.

But the United States, I believe, is the ultimate recourse of the nations of Western Europe. Only through the strength provided by the United States can they hope, as small and medium-sized powers, to stand up against the major forces represented by the Soviet Union and its allies.

Your question, focused on how much of our force structure should be prepared to go to Europe. There is a distinction between our ready contribution, which at the present time is $4\frac{1}{3}$ divisions, and the larger contribution. We size our forces for a major conflict, hoping that that conflict will not take place and will in fact be deterred by the existence of our forces and those of our allies. But in the event of a conventional conflict in Europe, we would be sending on the order of 11 or 12 divisions to Europe as a way of helping to deter what is an immediately ready—I hesitate to use the word "threat"—a ready capability on the other side of 86 to 88 divisions.

Senator CANNON. In your statement you indicated that in the sixties your predecessors maintained or were required to maintain an active and reserve force to fight $2\frac{1}{2}$ wars. Now, we know that that was never accomplished. It became very evident as a result of Southeast Asia that this was just a paper objective rather than a real objective. I am wondering how realistic our objective is now with respect to the view that we have of our problem at the present time?

Secretary SCHLESINGER. I agree entirely, Senator Cannon, with the thrust of your comments. The $2\frac{1}{2}$ -war capability turned out to be much less than that. As a result, we mobilized 900,000 additional men and expanded the force structure substantially during the Vietnamese conflict. And that was what formally would be regarded as half a war.

The CHAIRMAN. Thank you, Senator.

The only thing we can say is that in scaling down our aspirations from $2\frac{1}{2}$ wars to $1\frac{1}{2}$ wars, we are more realistic at the present force level. I think that the $16\frac{1}{3}$ divisions that we previously maintained

prior to the Southeast Asia war was on the thin side—very thin side—in relation to a 2½-war capability. It was barely reasonable for a 1½-war capability. I think we are very much on the thin side today, but less so than we were prior to 1965.

Senator CANNON. But the objective has changed. You don't envision a requirement for a 2½-war situation today?

Secretary SHLESINGER. No, sir. I hope that we will have an opportunity in classified session to go through all of the considerations that go into the NATO issue. I think you will see that our forces are paced by the NATO commitment, by the U.S. presence in Northeast Asia, plus certain reserve forces that we ought to maintain. But our Army general purpose force structure is not ample today. We have the lowest number of man that we have had since the wringout under Secretary Johnson prior to the Korean war.

Senator CANNON. Do you have any comment on the role of the Reserves vis-a-vis the active units in this total force concept?

Secretary SHLESINGER. We wholly endorse the total force policy. In the briefing that General Abrams gave to the chairman yesterday—a briefing that he will be giving to this committee—he indicated the closer integration of the Guard and Reserve units into the active duty forces as a mechanism for increasing the ready combat capability of the United States. So we are wholly in support of that policy.

EQUIPPING OF GUARD AND RESERVES

Senator CANNON. One of the policies in the past with respect to the Guard and the Reserves has been to pass off old equipment to these units to give them units to train with and work with. Is that concept being changed at all here? Shouldn't these units be equipped the same as the regular units with modern, up-to-date equipment rather than just having hand-me-downs, so to speak?

Secretary SHLESINGER. It is a little embarrassing for me, Senator, in view of the chairman's introductory remarks, to plead poverty before this committee. But I will plead poverty. Yes, indeed, we are looking at that. We would like to speed up the pace of modernization of the Guard and Reserve forces. But that will cost money, and we can only do it slowly. As I indicated, there is an aging problem even with regard to the active duty forces. So whether we can catch up in that area is a question that we will have to examine at length with this group.

Senator CANNON. Mr. Secretary, in your opinion is this Defense budget adequate for our national security today?

Secretary SHLESINGER. Yes, sir.

Senator CANNON. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator.

The CHAIRMAN. The chair will recognize the Senator from Colorado now, and he may continue with his time when we reconvene.

And the chair would be inclined to favor those that were here this morning but didn't get to ask questions, when we return.

We will take a recess now until 2:30.

[Whereupon, at 12:15 p.m., the committee was recessed until 2:30 p.m. of the same day.]

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MILITARY PROCUREMENT, FISCAL YEAR 1975

TUESDAY, FEBRUARY 5, 1974

U.S. SENATE,
COMMITTEE ON ARMED SERVICES,
Washington, D.C.

The committee met, pursuant to recess, at 2:35 p.m., in room 1114, Dirksen Senate Office Building, Hon. John C. Stennis (chairman).

Present: Senators Stennis (presiding), Symington, McIntyre, Byrd, Jr., of Virginia, Thurmond, Dominick, and Taft.

Also present: T. Edward Braswell, Jr., chief counsel and staff director; John T. Ticer, chief clerk; W. Clark McFadden II, counsel; Hyman F. Fine, Don L. Lynch, John A. Goldsmith, George Foster, Charles H. Cromwell, Edward B. Kenney, Charles J. Connelly, Robert Q. Old, professional staff members; and Christine E. Cowart, clerical assistant.

Senator SYMINGTON [presiding]. The hearing will come to order.

Chairman Stennis asked that I start it off.

Senator Dominick, you are recognized, sir.

Senator DOMINICK. Thank you, Mr. Chairman.

I want to start out by saying, Mr. Chairman, that I think that the Secretary's off-the-cuff delivery this morning was one of the most brilliant analyses I have heard in a long time. He did a superb job. It is not easy to do, with the scope of the program that we have. It was a help to me.

And it was a help, I think the chairman said, over and beyond your prepared statement. I certainly congratulate you on that.

STATEMENT OF HON. JAMES R. SCHLESINGER, SECRETARY OF DEFENSE; ACCOMPANIED BY ADM. THOMAS H. MOORER, USN, CHAIRMAN, JOINT CHIEFS OF STAFF, AND COL. ROBERT M. LUCY, USMC, LEGAL ADVISER AND LEGISLATIVE ASSISTANT TO THE CHAIRMAN, JCS—Resumed

Secretary SCHLESINGER. Thank you, Senator.

TRIDENT PROGRAM

Senator DOMINICK. I did want to get in with a few questions, Mr. Secretary. First of all, on the Trident, when you talked about the options between Narwhal and the Trident, I wasn't quite sure what this meant insofar as your planning of the Trident was concerned. Does this mean that we are not going forward with the acceleration of the Trident?

Secretary SCHLESINGER. I believe that I indicated in response to an earlier question, Senator, that the pace of the Trident program is slower than had been anticipated a year ago. We are planning two boats this year rather than the three that had been programed; that is one in fiscal year 1974 and two in fiscal year 1975 rather than the more rapid pace of the previous program. So there is some deceleration of the acceleration, if I may put it that way.

Senator DOMINICK. Does that mean that the building of the Trident submarines which were in last year's budget, do not proceed at the rate DOD desired?

Secretary SCHLESINGER. I am not sure what you are referring to in that connection. There was a cut of \$240 million in advanced procurement funding, and the Congress in its report indicated that the Department of Defense should report back with regard to whether that cut would adversely affect submarine production. In the fiscal year 1974 supplemental, we are asking for a return of some portion of that reduction in response to the Senate's direction. Specifically, we are asking for \$25 million for long lead-time items for the third boat.

Senator DOMINICK. Is the Narwhal a Poseidon type submarine, equipped with a Trident type missile?

Secretary SCHLESINGER. It would be roughly the size of the Poseidon, but it would have an advanced reactor which we believe would give it an enhanced degree of quietness as compared to the Poseidon. It would have, as you suggest, the Trident I missile in it.

INCREASED CAPABILITY OF SOVIET SS-18

Senator DOMINICK. Mr. Secretary, you mentioned at the beginning of your remarks today about the additional throw weight which is being incorporated into the Soviet ICBM, particularly I believe the SS-18, is that correct? Is that the right figure?

Secretary SCHLESINGER. The SS-18 will have about 20-30 percent more throw weight than the SS-9, but the 17 and the 19 will have two to three times as much throw weight as the SS-11. We are more concerned and surprised by the throw weight associated with the 17 and the 19 than with the 18.

Senator DOMINICK. My recollection—and I may be wrong—is that under SALT I modernization of weapons was allowed but larger silos to encompass them was not. Will the SS-18 require a larger silo on deployment?

Secretary SCHLESINGER. In some cases, the new missiles will require some enhancement of the present silos. The statement made by the United States at the time of the SALT I agreement was that anything in excess of a 15-percent enlargement of the present dimensions of silos would be taken by the United States to be a violation of the agreement. The Soviet Union is in a position to incorporate these new ICBM's in silos which are no more than 15 percent larger than the earlier version. So it would not be a violation of the agreement.

Senator DOMINICK. It would appear, then, that at the time the Soviet Union entered into SALT I that they already had this in mind, is that right?

Secretary SCHLESINGER. Yes, sir. It is very clear that they had these new missiles in mind, and that the SALT I agreement was drawn in such a way as not to preclude deployment of these new missiles.

Senator DOMINICK. That would also indicate that with the additional throw weights they would have an almost immediate capability of MIRV'ing?

Secretary SCHLESINGER. Yes, sir. We believe that the missiles that would go in the holes, if not constrained by SALT II, would be planned to be MIRV'ed, and that the Soviets have the capability of starting the deployment of those missiles within the near future.

Senator DOMINICK. I don't know whether this is classified or not. We will have a classified session later. So if you would prefer not to answer this in open session, just say so. What number of warheads would they have on a SS-18?

Secretary SCHLESINGER. We have seen as many as five RV's on the 18, and they may go as high as eight RV's, Senator. Of course, the technological possibilities are more or less unlimited in that connection. There is a trade-off between the size and yield of the RV and the number of RV's. But at the present time, we have seen five and would anticipate no more than eight.

Senator DOMINICK. In prior sessions before this committee it has been indicated the Soviets have MRV's, but not MIRV's. Are these MIRV's?

Secretary SCHLESINGER. Yes, sir, on the new missiles.

Senator DOMINICK. Have they had enough tests to make sure that they are reasonably accurate?

Secretary SCHLESINGER. No, sir. I believe that would not be the case. If I may amplify that, an important characteristic of the new missiles—the 16, 17, 18 and 19—is that they have onboard computers which the prior generation of missiles lacked. Consequently, this gives them the potential for better guidance and improved accuracy, and, of course, the MIRVing possibility.

You asked earlier about when the Soviets would know about the accuracy of these new missiles. I do not believe the program of tests to date provides them with much assurance about this capability. But the program of testing is continuing.

Secretary DOMINICK. Are they in the process of presently deploying the 16, 17, 18 or 19?

Secretary SCHLESINGER. No, sir, not as yet.

OVERSEAS RESERVES AND AIRLIFT REDUCTION

Senator DOMINICK. On page 22 of your written statement you refer to the strategic airlift, and the strategic reserves. By that are you implying further overseas reductions are in order? If so, what countries and what numbers, and what is the time schedule?

Secretary SCHLESINGER. We are not planning any unilateral reduction of our forces in Europe at this time. The reductions we would take in NATO would be mutual reductions resulting from the MBFR negotiations. The improvements we plan in airlift and our reserves would give us the opportunity of deploying forces to Europe rapidly. For other parts of the world, of course, the answer is that we have

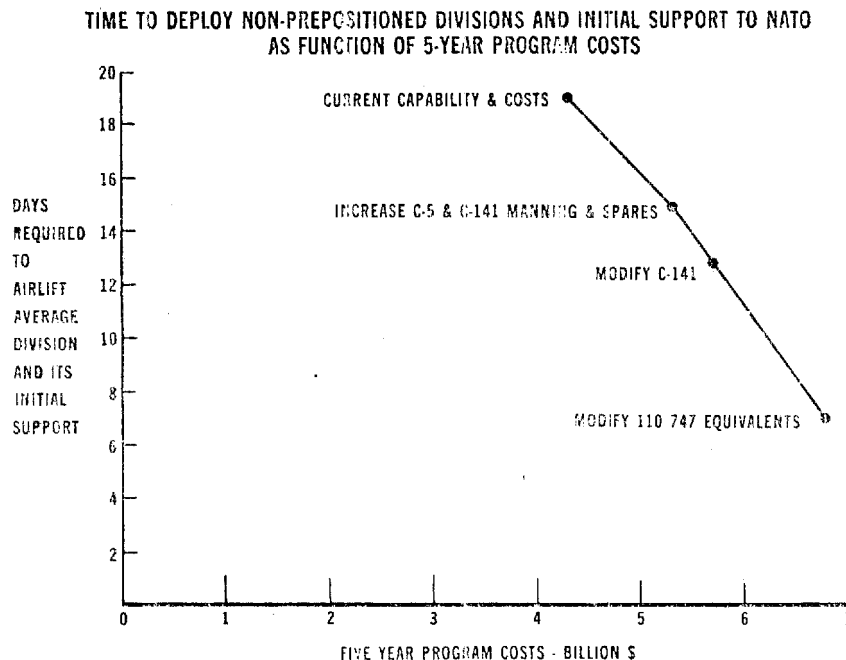
been reducing forces. We have reduced forces in Japan, Korea, and Southeast Asia including Thailand. Five hundred and fifty-thousand men have been returned from Vietnam. With the exception of Vietnam, these improvements would offer the possibility of reinforcement, should there be trouble.

But the airlift capability is related to equipment reinforcements, as in the airlift to Israel last fall and the airlift prior to the agreements that were reached with the North Vietnamese bringing an end to hostilities in Southeast Asia—or at least the American involvement in those hostilities. So the airlift is necessary for more than the movement of troops.

As you know, Senator, we are planning to expand the capability of our airlift without increasing the number of aircraft in the force. For example, we are planning to increase the crew manning of the C-5s and the C-141S, which will permit a greater wartime utilization rate. Also, we are proposing the development of a stretched version of the C-141 which would enhance the carrying capacity of the existing C-141 by about 30 percent.

These are relatively cheap changes.

Also, we are proposing to modify some 747's.



Now the effect of this would be to reduce the time required for the deployment of an average division to Europe from 19 days to 7 days, utilizing the improved airlift.

Senator DOMINICK. I might say I am delighted over that. That is something that I have been pushing for for a long time.

AWACS DEPLOYMENT

Mr. Secretary, on pages 13 and 14 of your statement you say:

We will decrease our active air defense of the Continental U.S. reducing the number of air defense fighter squadrons and SAM batteries. Without an effective antimissile defense, precluded to both the U.S. and USSR by the ABM Treaty of 1972, a defense against Soviet bombers is of little practical value.

I have some doubt about that conclusion; however, to continue your quote,

We will, however, retain the capability to protect the sovereignty of our airspace and defend against limited threats.

Does that conclusion—namely, that the defense against Soviet bombers is of little practical value—affect the total requirement for a AWACS aircraft?

Secretary SCHLESINGER. No, sir. Ultimately it would, if we determine that there is no relevancy to the deployment of AWACS for continental air defense. The chief role of the AWACS that we see at the present time relates to improving the air defense capabilities of our general-purpose forces in Europe. The initial AWACS buy will be related to this general-purpose force mission rather than to continental air defense.

As I indicated in my statement, our continental air defense requirements include a limited capability, so that nobody has a free ride over the United States. While we recognize that in a coordinated nuclear strike we would be unable to protect American cities, still we do not want anybody to feel that he can overfly the United States or the North American continent without paying a significant attrition. That would be the principal purpose of our air defense forces.

Senator DOMINICK. My time has expired. Thank you.

Senator SYMINGTON. Senator McIntyre.

Senator MCINTYRE. Mr. Chairman, are we under a 10-minute rule?

Senator SYMINGTON. Yes.

Senator MCINTYRE. Mr. Secretary, I want to say at the outset that your presentation this morning I felt was brilliant. I found it very instructive. I don't say I agree with everything, but I thought your discussion of the perspective of the worldwide role of strategic forces was excellent.

Secretary SCHLESINGER. Thank you.

SALT I AND DEESCALATION

Senator MCINTYRE. There is one thing that the American people would like to know. Last year we had, I think we called it, the budget of peace, and SALT I was in the air. We thought maybe that this meant that somehow we were going to come down from this horror race that we are involved in. This year we are in, it seems to me, a different climate again. SALT II is lagging. The requests before the committee are multitudinous. I say this even though you have said some things on R. & D. that I kind of like. For example I agree with you that just because we develop a system we don't have to go ahead and deploy it.

Still Mr. Secretary, must we continue to escalate and escalate and even up to the confrontation? When will we find the day when people begin to see the senselessness of some of the things we are doing?

Secretary SCHLESINGER. Senator, I am optimistic, in that regard. I think that with regard to SALT I, we did break the momentum behind the numerical buildups associated with the Soviet Union's strategic missile forces, particularly the ICBM program. We now have a quantitative lid on both sides with regard to these forces. And we are hopeful that in the course of SALT II we can reach a permanent agreement assuring equivalence, hopefully at a lower level of forces than we have today. Now, it is plain. I think, that the gross capabilities embodied in the numbers and throw weight of Soviet missiles under development, if married to present American-type technology, hold the potentiality for initiating another turn in the arms race. That need not materialize if both sides exercise judgment and restraint, and I think there is a reasonable hope for that.

I should also point out that we are only spending \$7.6 billion a year directly on the U.S. strategic forces, which is about 8.2 percent of the total defense budget, aside from retired pay and other questions of that sort. In the early 1960's, the United States was spending far more in real terms. In fact, our current spending on our strategic forces is about half of what it was in that earlier period of time. Now, that is not the millennium, but it does indicate some degree of prudence and constraint on our side.

In sum, while I can't give you a totally optimistic answer, I think there is some basis for hope.

Senator MCINTYRE. I think that you must be able to understand how people like ourselves that represent the constituents back home have to explain these developments. I remember SALT I after they wanted another \$400 or \$500 million to spend on new equipment, new items. So it is discouraging. Every year I have a feeling about this time that the military begins to try to scare the hell out of us. I don't say they do this intentionally. I just think it is part of the game. I was glad to hear you say that you didn't want to unduly alarm us.

RETALIATION CAPABILITY

Here is a question. I know the answer, but let me just ask it. Does the Soviet Union today, this moment, have the ability, the capability of destroying our strategic forces without the certainty of its homeland being annihilated?

Secretary SCHLESINGER. Absolutely not, Senator. They have no certainty because they cannot destroy the retaliatory forces of the United States.

Senator MCINTYRE. That really isn't the ball game, but it is reassuring to know that.

NARWHAL AS REPLACEMENT FOR TRIDENT

I see my old friend Trident. I want to ask a question that I asked last year. If there is the possibility, Mr. Secretary, or Admiral Moorer, for that matter, that a Narwhal submarine would be a replacement for Poseidon instead of Trident, why not relax the Trident submarine program by reverting to the 1980 IOC, 2 years later? This would permit, we argued last year, the backfit of Trident I missiles, the C-4 missile, into Poseidon hulls beginning in 1977 if needed, and it would minimize, Mr. Secretary, the vast investment now proposed for Trident construction with little if any risk.

Secretary SCHLESINGER. My judgment on that, Senator—and I think that we need to give you a fuller response on that question—is that we are now engaged in a program whose funding and expenditure rate support an initial operational deployment of the Trident in 1978. I believe that more money is required to stretch out many of these programs than to go ahead on schedule. Now, as I indicated earlier, there is a deceleration of the acceleration in the case of the Trident production rate. But that applies to the number of boats bought in each year rather than stretching out the production time of particular boats.

Senator McINTYRE. This is not the place to get into an argument. But it seems to me you have injected an idea of a different type of a submarine than I heard about last year. I don't know if it is bigger than the Poseidon. I have a figure here of \$1,166,800,000, if I read correctly, for fiscal 1975, ship construction, submarines two and three, advance procurement. So now another factor, a different type of submarine is now a possibility, and all during that whole debate you could never show us whether you had anything that necessitated urgency. You always could have taken the Trident I missile and put it on the Poseidon, which it will fit, but it still doesn't make sense to me. But I will talk that over with the R. & D. fellows when they come by.

NATO HEADQUARTERS REDUCTION

Senator Nunn and I had—he is not here, because he is on a mission for the chairman—found ourselves in Ankara in the NATO meeting, when everything was happening back here. You talked about NATO as the cornerstone, and you invited us to go and take a look at it. I don't think there are enough days in the week to look at all the things we are supposed to look at. But, Mr. Secretary, the German representative said there that the American troops are all in the wrong place, they are all down in Bavaria. One delegate said, you have got too many headquarters. Are you going to take a look at it?

Secretary SCHLESINGER. Yes, sir.

Senator McINTYRE. Have you been on the ground, taken a field trip?

Secretary SCHLESINGER. No, sir.

Senator McINTYRE. I am impressed by your argument on NATO, as the cornerstone. I don't want to see any unilateral action. I was all set last year, you know, with a year of Europe. I thought a lot of things were going to happen.

Secretary SCHLESINGER. A lot of things did happen.

Senator MCINTYRE. But if you want the Congress to stand behind this NATO as you made it very emphatic today, you have got to help us. The fuel situation was a lot tougher for the European countries, than us. But it was disgusting. The Soviet Union was overflying Turkey, and we weren't allowed even to come near it, and other countries. You know better than I. It was kind of a sickening thing, Mr. Chairman, to see our allies falling apart on us. Admittedly, the pinch was a lot tougher on them than us.

You want to have the Congress stand behind NATO—and I want to stand behind it. I want to have some help. And I am not getting it.

Secretary SCHLESINGER. I agree with that entirely, Senator McIntyre. In my initial comments I indicated that the strength of the conventional deterrent is far greater in Southern Germany than it is in Northern Germany, and that this is due to the presence of the U.S. forces in the South. Sometimes it is said that the U.S. forces are mal-deployed. Of course, if we had time in an emergency, we could re-deploy them in part. We are moving ahead with regard to better integrating our air assets in both the north and south, so that the large body of American aircraft could be employed in the defense of the northern region should an attack take place there. But in general, we agree with your comments in that regard.

We are also in agreement with regard to the headquarters issue and the report that Senator Symington presented for this committee last year. I think that we are making significant progress in that area, and we will have more progress to report.

Finally, the United States cannot provide a conventional deterrent by itself. It must have the willing support and the ready support of its European allies. If the only purpose of American troops is to provide a presence, then we can provide that presence with fewer forces than we have in Europe today. The European allies must do more. We have heard fair words on this subject from our European allies. We hope their deeds will correspond and that we can provide persuasive evidence of this. If our European allies fail to provide the necessary forces, we are in agreement with your implied suggestion that the conventional forces we have deployed, however useful in some hypothetical context, might not be as useful as we would like in the context of an actual conflict in central Europe.

Senator MCINTYRE. Thank you, Mr. Chairman.

Senator SYMINGTON. Senator Taft.

INCREASE OF SUPPORT IN NATO FROM GERMANY AND GREAT BRITAIN

Senator TAFT. Thank you very much, Mr. Chairman.

Mr. Secretary, you just stated that you are hopeful with regard to the degree of support we are going to get from our NATO allies. Isn't it true that just within recent weeks there have been indications from both Great Britain and Germany that we cannot expect the degree of financial support and support of payment to us that we had hoped that we were going to get?

Secretary SCHLESINGER. I think there has been no change in the situation in recent weeks. The British, of course, have a far more massive balance-of-payments problem than we have. From the very outset they have indicated that, although they are spending a substantial proportion of their gross national product on defense, they will not help us on balance-of-payments questions.

The Germans, of course, have been the primary source of offset, and they will continue to be. I think we will be able to announce a new offset agreement shortly, and that from the standpoint of the finance side, the Germans will have made a major contribution.

Also, the Germans are restructuring their forces, which will result in the addition of three brigades, hereby increasing their force structure from 33 to 36 brigades. They are using some of their manpower to form a newer and readier reserve. This is a hopeful sign. Within a brief period of time, the Germans are prepared to mobilize 1.2 million men. So, although there are some deficiencies in the contribution of our NATO allies, I think the German contribution per se is one that is not without a high degree of respectability.

Senator TAFT. I wasn't talking so much of their contribution. It is encouraging to hear that they are willing to take steps that would make their own contribution more effective. What I was talking about is support payments. Do you think we are going to get more support payments out of Germany next year than we have had in the past year?

Secretary SCHLESINGER. I think so, Senator. I am not familiar with the negotiations, but I think we are on the verge of an agreement with the Germans on the offset. That is a bilateral rather than a multilateral arrangement.

FAR EAST SITUATION

Senator TAFT. You have mentioned the possible shift in the counterforce concept so far as nuclear strategy is concerned, and you discussed the throw weight changes and the balance that is involved. If we are going to pick soft targets, isn't it possible that the Russians, in looking at our potential throw weight, are also taking into account that if we targeted a soft target it might well be their East Asian army? We have had almost no discussion with regard to these questions on throw weight of the Far Eastern situation, and China's potential, and what Russia's reactions are related to that potential.

Secretary SCHLESINGER. Since 1965, the Soviets have built their forces in the Far East so that they now have roughly 40 divisions there. From 1965 to 1969, much of their buildup went into the Far East. Since 1969, there has been a further building up of forces facing Western Europe as well.

The posture of the Soviet Union is such that we do not believe they would move against China unless there were an additional buildup in the Far East. The Soviets have something on the order of half a million troops out there. The Chinese have about 1.2 million troops along the Siberian border.

Is that sufficient, Senator Taft?

Senator TAFT. I was really questioning what effect it had—isn't it a fact that shifting to a counterforce concept may be a destabilizing factor insofar as the Far East is concerned and the Russian-Chinese thing, because we are taking into account now that we may be targeting possible military targets in that area? If I were a Russian I would certainly be thinking that way.

Secretary SCHLESINGER. I don't think that would be a destabilizing factor, Senator. As you know, there has been speculation in the press, for some time now—at least a year—about the possibility of a hypothetical Soviet counterforce attack against Chinese nuclear capabilities. We cannot read the Soviets' mind. But let me underscore here that it is far easier to hypothesize about these attacks when one is working with paper and pencil than it is actually to make the decision, given the capabilities available, to launch such an attack. But that would be an issue in the Kremlin. I don't believe any change in our targeting strategy is likely to have much impact on it one way or the other.

THROW WEIGHT THREAT

Senator TAFT. Mr. Secretary, I think earlier in your testimony you mentioned a 5-to-1 throw weight threat unless we reacted or unless SALT II had some effect. What time phase were you talking about in discussing that?

Secretary SCHLESINGER. I think I must await a classified session to cover this particular point fully. But the indication I gave earlier was that if the Soviets were to start refitting their existing holes about 1975-76, and if they redeployed at the rate of 15 percent per annum, it would be about 1981 before they had the amount of throw-weight advantage indicated.

SUPPORT FOR NARWHAL DEVELOPMENT

Senator TAFT. With regard to the submarine question, Senator McIntyre has already asked you, what are we talking about costwise? I was very interested to hear the discussion of the Narwhal concept and the 16 missile approach, because, very frankly, I was unable to support Trident, simply because I felt that perhaps there were better approaches that could be developed very much along these lines. Is the sole reason that we are not moving faster toward Narwhal rather than Trident related to cost? Or what are the factors which we are weighing in the balance?

Secretary SCHLESINGER. I think each submarine has its own unique advantages. The advantages of a new SSBN with the Narwhal-type propulsion system are that it would be less costly and the smaller number of tubes per boat may give it a greater inherent protection in the long run appropos contingent developments in the ASW area. The advantage of the Trident submarine is that with the larger number of tubes per boat and the greater size of the missile tubes themselves, it can house a larger missile with extended range, or concurrently, the possibility of greater throw weight. The latter could counterbalance Soviet throw weight in certain hypothetical contingencies.

Senator TAFT. You are not talking about a smaller missile than the Narwhal itself, just the missile itself.

Secretary SCHLESINGER. The smaller SSBN we are investigating would carry the C-4 missile—the so-called Trident I—which is the missile to be initially deployed in the Trident submarine. The Trident submarine also will carry, at a future date, the Trident II missile, which is a much longer missile than the C-4, with greater range or throw weight, as the case may be. That larger missile, the D-5, could not be carried by a smaller SSBN-class submarine, which would be limited to the Trident I.

Senator TAFT. Thank you, Mr. Chairman.

The CHAIRMAN [presiding]. Thank you, Senator Taft.

Senator Byrd.

Senator BYRD. Thank you, Mr. Chairman.

OUTLOOK OF 1975 SUPPLEMENTAL REQUEST

Mr. Secretary, the Defense Department has asked for a supplemental appropriation for the 1974 fiscal year. If the Congress approves the Defense Department proposal for fiscal 1975, can you give the committee assurance that the Defense Department will not seek a supplemental for 1975?

Secretary SCHLESINGER. There is now no intention whatsoever, Senator Byrd, to seek a supplemental for fiscal year 1975. However, I would hesitate to give complete assurance in that regard because the international climate might change.

I brought along the President's budget for fiscal year 1974, Mr. Chairman. We have inserted in the record the page from the budget apropos Senator Symington's question this morning. The budget authority requested in that budget was \$85.2 billion, and this included the pay supplemental that was mentioned earlier. That had been briefed to the committee.

Barring an international catastrophe that I cannot imagine at this point, Senator Byrd, the answer to your question is "No," we would not be contemplating a fiscal year 1975 supplemental.

Senator BYRD. Thank you.

UNFUNDED MILITARY RETIREMENT OBLIGATION

What is the unfunded military retirement obligation at this point? It was \$133 billion last year.

Secretary SCHLESINGER. It is a staggering sum, Senator. If it were \$133 billion last year, it will be even larger this year, and larger next year.

Senator BYRD. I am taking that \$133 billion from memory. If you don't have the figure available, would you supply it for the record?

Until just last year or so that figure was carried in the budget. But beginning last year it was eliminated from the budget.

Secretary SCHLESINGER. That does not reduce the Federal liability.

Senator BYRD. You don't have the figure available, I take it?

Secretary SCHLESINGER. No, sir. I shall insert it in the record.

[The information follows:]

The unfunded military retirement obligation is currently projected at \$149 billion as of June 30, 1974.

FISCAL YEAR 1975 BUDGET INFLATION FACTOR

Senator BYRD. In your prepared remarks, Mr. Secretary, you state that the fiscal year 1975 budget in constant dollars is smaller than the fiscal year 1964 budget of a decade ago.

Secretary SCHLESINGER. Yes, sir.

Senator BYRD. What inflation factor did you take to arrive at that conclusion?

Secretary SCHLESINGER. I don't have a chart that is handy on that, Senator, but pay increases between 1964 and 1975 are in the order of 178 percent.

Senator BYRD. But you are speaking in constant dollars. What I am getting at is, I assume what you mean is if there had been no inflation, is that what you meant?

Secretary SCHLESINGER. I meant no inflation or pay increases. The pay increases have been, as you know, very substantial.

Senator BYRD. What I am trying to do is understand your sentence here: "In fact, the fiscal year 1975 budget in constant dollars is smaller than 1964."

Secretary SCHLESINGER. If we take the pay rates and the price level of 1964, the budget that we are proposing today would come in at about \$46.6 billion, or, correspondingly, the program of 1964 at 1975 pay and prices would come in at about \$93.3 billion.

Senator BYRD. When you say "constant dollars," doesn't that mean eliminating the inflation factor?

Secretary SCHLESINGER. Yes, sir.

Senator BYRD. But you are bringing in something else now about the pay changes?

Secretary SCHLESINGER. The adjustment of pay to reflect changes of productivity in the general economy is one of those factors that must be taken into consideration in maintaining constant dollars.

Senator BYRD. If I understand it correctly, then, it seems to me what you are saying is that the dollar has decreased in value by 50 percent during that period of time. I don't deny that it has.

Secretary SCHLESINGER. Let me see if this chart will be helpful, Senator Byrd.

DOD MILITARY AND MAP **FY 1964 PROGRAM AT FY 1975 PRICES** **(OUTLAYS, \$MILLIONS)**

	ACTUAL FY 1964 OUTLAYS	PAY RAISES AND PRICE INCREASES	COST AT FY 1975 PRICES
MILITARY BASIC PAY	\$ 8,511	178.3%	\$23,689
MILITARY ALLOWANCES	4,475	62.1%	7,254
CIVIL SERVICE PAY	7,305	84.3%	13,462
PURCHASES	29,286	59.9%	46,830
SUBTOTAL, EXCLUDING RETIRED PAY	49,577	84.0%	91,235
RETIRED PAY	1,209	95.3%	2,362
TOTAL	50,786	84.3%	93,597
REDUCTION IN PROGRAM EXCLUDING RETIRED PAY: \$11,446			
FY 1975 DEFENSE BUDGET, EXCLUDING RETIRED PAY			\$79,789
RETIRED PAY			6,011
TOTAL FY 1975 DEFENSE BUDGET			\$85,800

In 1964, for example, we had about 2.7 million men under arms. We had a much lower pay scale.

Senator BYRD. I was just interested in the inflation factor. What does the Department of Defense consider to be the inflation factor over that period of time?

Secretary SCHLESINGER. It is a composite, Senator. The last item on the chart, which is the inflation for the outside purchases of the Department, is 60 percent. That might be what you would refer to as the inflation factor. The other items reflect the fact that the pay rates for various categories of people have gone up substantially. We take all of those items into account in our constant dollar calculations.

WEAPONS ACQUISITION FUNDING

Senator BYRD. In relation to the total Defense budget do you feel that the Defense Department is spending enough on weapons acquisitions?

Secretary SCHLESINGER. Given the overall level of resources, I think the answer is "Yes." We will be moving toward greater efficiencies, we hope, in the use of our manpower. But given the present set of price relationships that we face, we think that this is the best allocation of resources under current conditions. We are down substantially with regard to the acquisition of weapons.

Senator BYRD. Your request for procurement in 1975, plus your supplemental, is less than \$15 billion, as I understand it.

Secretary SCHLESINGER. Of course, procurement includes some other items that are not included in the authorization bill, such as ammunition accounts and the rest. Our request for procurement, R. & D. and construction, which we regard as the investment account, amounts to \$31 billion in fiscal year 1975 prices.

Senator BYRD. But the new authorization for weapons systems is a little less than \$15 billion.

Secretary SCHLESINGER. Yes, sir.

Senator BYRD. Your new request for authorization for R. & D. is about \$9 billion.

Secretary SCHLESINGER. Yes, sir.

Senator BYRD. The two taken together is a relatively small percentage of your total request.

Secretary SCHLESINGER. Yes, sir, that is the inverse of the higher rates that we must pay for manpower today.

Senator BYRD. In your table 1 where you break down by summary a function of the classification you have military personnel. I don't see an item in here for civilian personnel. I assume that is probably under operation and maintenance, is it?

Secretary SCHLESINGER. Yes, sir, it is under O. & M. for the most part. The civilian manpower runs about \$15 billion.

NATO FORCE

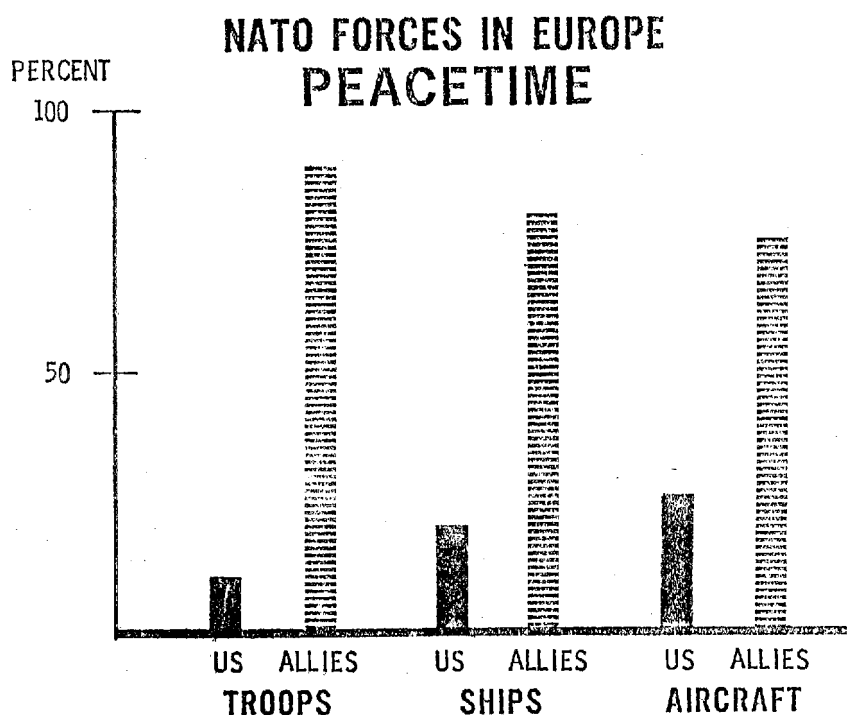
Senator BYRD. You mentioned in your excellent presentation this morning that the Europeans constitute 80 percent of the ready NATO forces.

Secretary SCHLESINGER. Yes, sir.

Senator BYRD. Would you amplify on that a bit?

Secretary SCHLESINGER. Of the ready forces of NATO, the Europeans are putting up about 90 percent of the ground forces, about 80 percent of the naval forces, and about 75 percent of the air forces. Those are the forces that are presently deployed in the NATO regions. The NATO allies—European allies—maintain something on the order of 2½ million men under arms. Most of those, of course, are deployed near the NATO frontiers. For the United States, our major contributions to NATO do not fall in the aggregate deployment of our forces overseas; rather, that we maintain the strategic deterrent for the allies, that we provide the nucleus of the tactical nuclear deterrent for most

of them, that we furnish the intelligence and reconnaissance by and large for the allies, and that we make some contribution to the immediate ready forces. Our contribution is indicated on the next slide with regard to troops, ships, and aircraft.



So I would say that we have a pretty good bargain in the sense that for every element of the ready forces we put up, our allies put up about four. However, in terms of the additional forces that would be brought up, particularly air, the United States provides a very substantial part of the contribution, something on the order of 50 percent, rather than 20 percent.

Senator BYRD. That was the point that I thought should be developed.

Secretary SCHLESINGER. Yes, sir.

In the case of reinforcement, we would provide a major share—50 percent, I believe, is the approximate number.

Senator BYRD. In your judgment would NATO be strengthened if Spain were a part of NATO and would allocate some of her forces to NATO?

Secretary SCHLESINGER. I think there is no question about that. That is fairly straightforward arithmetic.

Senator BYRD. Is that being advocated by the Department of Defense?

Secretary SCHLESINGER. I would shy away from the word "advocacy." We have put out some hints about closer cooperation between

Spain and the NATO alliance. It is not clear that the possibility of that close cooperation is universally regarded with acclaim within the Alliance.

The CHAIRMAN. Senator, your time has expired.

Senator BYRD. Thank you, Mr. Secretary.

The CHAIRMAN. I have some other questions, as other members doubtlessly do. I think we ought to call on Admiral Moorer at this point.

You have a prepared statement, I know, Admiral Moorer.

Admiral MOORER. Yes, sir.

The CHAIRMAN. We will come back to the questioning of the Secretary.

Would you put your statement in the record, Admiral, and either summarize it or point to the things that you want to emphasize.

Admiral MOORER. Yes, sir; I would be glad to do that.

[The information follows:]

I appreciate this opportunity to present my views on the military posture of the United States. In my opinion, no task assigned senior US military leaders is more important than the duty of keeping the Congress and the American people fully informed on military matters. In the final analysis, our military posture and our national security can be no stronger than the determination of the American people to defend our Nation and its freedoms. This collective will is both developed and represented, in large measure, by Congressional attitudes and decisions. Your role in this process is vital.

In my prior assessments of the military balance and in the over 100 appearances before Congressional Committees, it has always been my intention to relate the military issue at hand to the actual and potential challenge facing the United States on the international scene. That remains my intention in this, my fourth assessment as Chairman of the Joint Chiefs of Staff.

The military posture of the United States can be judged meaningfully only by relating our military forces—both strategic and general purpose—to those of our most powerful potential adversary—the Soviet Union.

In this regard, the negotiation and signing of the Treaty on the Limitation of Anti-Ballistic Missile Systems (ABM Treaty) and the Interim Agreement on Certain Measures with Respect to the Limitation of Strategic Offensive Arms (Interim Agreement) constituted first steps in our effort to restrain the obvious and destabilizing momentum of the USSR strategic force build-up and to establish some control over the deployment of significantly increased strategic forces by both the US and USSR. The force levels for the US and USSR established by the ABM Treaty are equivalent, but the numerical ICBM and SLBM force levels authorized for the Soviet Union by the Interim Agreement are larger than those authorized for the United States. Because of technological and other strategic offensive advantages possessed by the United States, this temporary imbalance was considered acceptable, particularly when weighed against the advantages of reaching some agreement on limiting strategic arms. In the Joint Resolution authorizing the acceptance of these agreements, however, you will recall that the Congress specified the President should seek a future agreement which "would not limit the United States to levels of intercontinental strategic forces inferior to the limits provided for the Soviet Union." Compliance with this Congressional mandate is a primary objective of the current follow-on negotiations to conclude a permanent agreement.

I report to you today that aggressive modernization programs are now being undertaken by the Soviet Union which could place the United States in a position of strategic inferiority in the foreseeable years ahead. These programs, although aggressive, are within the terms of the Interim Agreement now in effect. If we are to maintain our relative position, we must continue the development and deployment of the strategic systems requested by the President and must continue to insist upon the equivalence which the Congress so wisely has called for as an ultimate goal in our Strategic Arms Limitations negotiations.

With regard to the balance between the general purpose forces of the Soviet Union and the United States, I have noted with apprehension for the past several years that a major shift in the naval balance is taking place. The U.S. still has

the edge in the global reach of our fleets through our carrier and amphibious task forces. The USSR, however, is building a modern and increasingly powerful naval force capable of interdicting sea lines of communication and obstructing the projection of our military power across the oceans to assist our allies. The exact role of the new Soviet carrier force is not clear, but we may be sure that it portends a new era in the projection of seapower by the USSR.

The tactical air forces of the Soviet Union are in the midst of a major and significant modernization program. The program appears to be directed at overcoming the long-standing qualitative advantage held by U.S. tactical air forces in the ground attack role. The Soviet tactical air forces hold major quantitative and some qualitative advantages in the air superiority role.

The Soviet weapons and equipment observed in the Middle East, plus other evidence, clearly show the large USSR ground forces also are being modernized with new tanks, new combat vehicles, as well as new and sophisticated combat support weapons and systems. Additionally, there are indications that the Soviet Union is developing air mobile units with ground attack helicopter support which, when combined with its new tanks and combat vehicles, will increase the tactical mobility and firepower of its ground forces.

The strategic programs of the Peoples Republic of China (PRC), by contrast, are proceeding somewhat slower than estimated last year. We still expect the Peoples Republic of China, however, to deploy by the end of this decade a small, but effective, ICBM force which will be capable of striking all of the Continental United States. PRC general purpose forces are being modernized, but also at a relatively slow rate—when compared with those of the U.S. and USSR. Nevertheless, the Peoples Republic of China is continuing to increase its overall military power.

Events of the past few months in the Middle East once again have proven that the military balance must be assessed on the capabilities of potential adversaries rather than on their announced or estimated intentions. Intentions change much more quickly than capabilities and often change solely on the basis of the opportunities that a lack of opposing capability presents. Therefore, the only sound course of action for our future defense planning is to analyze, as best we can, the military balance between the United States and opposing forces based on the capabilities of existing forces projected over the next few years.

STRATEGIC FORCES

I have emphasized in the past that no task is more important, from a military perspective, than that of developing, maintaining, and protecting a credible strategic deterrent. Détente, offering the opportunity for permanent and lasting relaxation of tension, requires that we be strong enough to negotiate with confidence and to insure that our good will is not misconstrued as lack of will, thereby encouraging adventurism. This task presents many challenges because, in making an assessment of the military capabilities of our potential adversaries, we cannot afford to look only at the capabilities of those forces in being today. The long lead time of modern strategic weapon systems demands that we also devote our best efforts to the evaluation of the relative military balance as it is likely to evolve in the years ahead and as it is likely to be perceived in the eyes of our potential adversaries, our allies, and the rest of the world. If we are to maintain a credible strategic deterrent, actual military strength is essential but the appearance of military strength cannot be neglected.

Significant U.S. and U.S.S.R. Initiatives—Strategic Offensive Systems

Shown on Chart 1 are the ongoing U.S. and U.S.S.R. strategic offensive initiatives which will have significant impact on the strategic balance. I will highlight these initiatives so that the dynamic nature of military balance for the foreseeable future can be fully understood.

The Soviet Union clearly has embarked on an unprecedented major commitment to the modernization of its strategic offensive force.

Four new ICBM designs of varying classes and characteristics currently are being flight tested. These new systems will incorporate improved launch, guidance, and reentry techniques, which will permit the U.S.S.R. to introduce accurate MIRVs into its missile inventory. A corollary of these significant new missiles programs is the parallel construction and modification of hardened silos, capable of surviving appreciably higher over-pressures and ground shocks. Additionally,

a multiple reentry vehicle (MRV) version of the SS-11, is being deployed rapidly in some of these new silos for "light" ICBMs.

The U.S.S.R. has moved forward rapidly in modernizing its SLBM force. The new 4200 nm SS-N-8 has been deployed aboard the first three DELTA-class submarines—now in series production. Improvements for the SS-N-6, the SLBM deployed aboard YANKEE-class submarines, may be nearing operational status. This new variant of the SS-N-6 is expected to have a slightly longer range and may be deployed in YANKEE-class submarines.

We are uncertain as to the exact military role of the new BACKFIRE variable-geometry wing, supersonic bomber. It is certainly capable of performing intercontinental attack missions, but it is probably best suited for peripheral attack. We anticipate that it will be assigned both roles.

In contrast to the Soviet Union's dramatic program, ongoing U.S. initiatives in the strategic arena are modest and deliberate. The United States is undertaking only basic research on advanced ICBM technology. No new ICBM system is under engineering development. Continued improvements are being made, however, in both MINUTEMAN II and III systems. By the end of FY 1975, all MINUTEMAN Is will be replaced by MINUTEMAN IIs. Additionally, the hardness of MINUTEMAN II and III missiles and silos is being upgraded; and a Command Data Buffer system is being installed to permit the rapid remote retargeting of MINUTEMAN III missiles. These improvements are designed to increase further the survivability, flexibility, and responsiveness of our MINUTEMAN force.

As was noted last year, the last of the POLARIS A-2 SLBMs will be phased out of the U.S. force by mid 1974. By mid-1977, the planned POLARIS-to-POSEIDON conversion program will have been completed. At that time, we will have 31 POSEIDON submarines and 10 POLARIS A-3 submarines. The first TRIDENT submarine, with the new 4000 nm C-4 missile, is expected to enter the force in FY 1979.

The B-1, which is being developed as a replacement for a portion of the B-52 force in the 1980s, will begin flight testing this fall. The results of the flight testing will be examined carefully prior to a production decision being made next year. In the meantime, funds are included in the FY 1975 budget request for modifications of 80 B-52D bombers to insure their effectiveness until the B-1 is capable of entering the force in adequate numbers to allow for replacement.

Significant U.S. and U.S.S.R. Initiatives—Strategic Defensive Systems

The U.S. and U.S.S.R. strategic defensive initiatives are displayed on Chart 2. These limited ongoing efforts will have far less impact on the strategic balance in the immediate years ahead than the strategic offensive initiatives. In fact, the significance of this chart is more related to what it doesn't show than to what it does. There are several reasons for this apparent restraint on both sides, but the primary limitation is the constraining influence of the ABM Treaty between the U.S. and U.S.S.R.

The ABM Treaty prohibits a nationwide ABM defense and places strict and substantially equivalent controls on ABM launchers, missiles, and associated radars. Under these limitations, the U.S. currently is proceeding with the deployment of SPARTAN and SPRINT ABM missiles at only one location—Grand Forks, North Dakota—and is continuing research and prototype development of the advanced SITE DEFENSE System. The U.S.S.R. has an operational GALOSH ABM system around Moscow, with limited capabilities, and is doing research and development work on two new ABM systems.

Turning to air defense, the Soviet Union already has in being an extensive nationwide system employing surveillance, warning, and control systems, a variety of surface-to-air missiles, and a very large interceptor force. The FOXBAT, now designated the MIG-25, adds a major capability to the Soviet air defense force. This MACH-3, all-weather interceptor carries a new air-to-air missile. Since the optimum performance of the FOXBAT seems to be at high altitudes, we believe that at least one of its primary roles will be against high-altitude, high-speed attackers, such as air-to-surface missiles.

Although the U.S. has no new strategic interceptors, the introduction of the F-14—being developed for fleet air defense—and the F-15—being developed as an advanced air superiority tactical fighter—will improve significantly the overall air superiority capabilities of U.S. general purpose forces. Either or both of these aircraft also could be employed by strategic air defense units. Similarly, the U.S. austere SAM-D program, which is being developed primarily to provide air defense for the Army in the field in the 1980s, could be effective in a strategic defense role, if so assigned.

The U.S. air defense system, even at its peak, was never comparable in size to the one deployed in the Soviet Union. Based on our overall priorities within a constrained budget, primary emphasis in U.S. air defense is now being placed on surveillance, control of air space, and providing warning of a bomber attack. There are clear risks involved in reducing our capability to limit a potential adversary's ability to employ manned bombers and cruise missiles against the U.S. However, improvement of U.S. air defense surveillance and control capabilities should, in the future, reduce those risks somewhat, since the limited air defense force assets and available general purpose augmentation forces then could be employed with greater effectiveness.

In the meantime, U.S. initiatives in Strategic Defense are limited to new technology in early warning and command and control. In addition, we are retaining the options, as mentioned, to convert new general purpose forces to new air-to-air missile. Since the optimum performance of the FOXBAT seems to be at high altitudes, we believe that at least one of its primary roles will be against high-altitude, high-speed attackers, such as air-to-surface missiles.

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In the meantime, U.S. initiatives in Strategic Defense are limited to new technology in early warning and command and control. In addition, we are retaining the options, as mentioned, to convert new general purpose force interceptors and the SAM-D to strategic defense at a later date. Funds for procurement of the first U.S. initiative listed—SLBM Warning Radar—were rejected last year by the Congress because of a belief that "our present warning systems are adequate." A study of these systems has been initiated by the House Appropriations Committee "in order to adequately evaluate future requests of this nature from all the Services." I welcome this study because I have been convinced by several JCS/DOD studies and reviews that our SLBM warning systems are not adequate, particularly in light of the deployment of the Soviet 4200 nm SS-N-8 SLBM.

The Over-the-Horizon Backscatter (OTH-B) radar system is being developed by the U.S. to provide long-range surveillance, detection, tracking, and identification of aircraft from the surface to the ionosphere. Although a production decision has not as yet been made, it could be operational by the early 1980s.

AWACS, the last U.S. initiative listed, stands for Airborne Warning and Control System. This system consists of a new all-altitude surveillance radar with associated data processing and command and control equipment installed in a Boeing 707 airframe. By mid-1977, it should provide significantly improved surveillance capabilities with respect to radar detection, active and passive tracking of airborne objects, identification of aircraft, and interceptor control for our strategic defense and tactical air forces.

The U.S.S.R. is continuing its research and development of over-the-horizon (OTH) radar. Finally, the U.S.S.R. has a modified transport aircraft, called the MOSS, which has been utilized in airborne warning and control since 1968. No new U.S.S.R. AWACS-type development has been noted.

PRC Strategic Forces

The strategic offensive programs of the Peoples Republic of China, when compared with the Soviet Union and the United States, represent a relatively small-scale but well-conceived effort. The overall strategic offensive capability of the PRC, however, is steadily growing and must be taken seriously even by the

super powers. The deliberate, but unhurried, pace of the PRC strategic offensive programs reflects the comparatively small number of technically qualified personnel working on these programs, the relatively limited resources available, and finally, the influence of long-range goals, rather than short-term objectives.

As indicated last year, a substantial expansion of nuclear production facilities is underway in the PRC. For this reason, we estimate that the Chinese stockpile of nuclear weapons will be expanded more rapidly in the years ahead.

Last year, I outlined the four different PRC strategic land-based missile programs and indicated that both an MRBM and an IRBM system may have been deployed. This deployment can now be confirmed. The third system, a limited-range ICBM, is still not believed to be operational; however, it could be deployed later this year. Although capable of reaching deep into the Soviet Union, this missile will not be able to reach the Continental United States (except for the western part of Alaska).

The fourth PRC system, a full-range ICBM, has not progressed as rapidly as we estimated last year. This large missile is in the same class as the US TITAN and the Soviet SS-9. It probably will not be operational until 1976 or 1977.

Forecasting the rate of progress of the PRC SLBM program has proved to be a very difficult task. We believe that the PRC is determined to develop a submarine-launched ballistic missile and a modern ballistic missile submarine; however, estimates of the operational dates for an SLBM and a new submarine have been, in the past, overly optimistic.

The PRC has one Soviet-type GOLF-class diesel-powered missile-launching submarine which it built during the early 1960s, but to our knowledge, it has never been equipped with missiles. If the PRC is indeed developing an SLBM, it is reasonable to assume that this submarine will be used as the test platform. No other PRC ballistic missile submarines are known to us; however, we cannot preclude the possibility that one or more may be under construction. In any event, we believe that it will be at least 1977 before such a system could become operational.

Turning to the strategic defensive forces, the PRC surface-to-air defense system is capable of providing only a limited point defense of key urban and industrial areas, military installations, and advanced weapons complexes. Although this system has undergone significant upgrading in the past four years, it still has major weaknesses. The PRC has only one operational SAM system, basically a copy of the USSR SA-2 system. We estimate that the PRC, by mid-1973, had deployed several hundred SAM launchers and that this deployment will continue to increase during the next few years.

Overall US and USSR Strategic Balance

The overall strategic balance between the United States and the Soviet Union is in a state of dynamic equilibrium or in more familiar terms—relative strategic parity. The Soviet Union has, however, generated a momentum in new strategic offensive programs which, in the absence of successful negotiations or increased strategic offensive programs of our own, could easily upset this balance in the future. The USSR holds a significant numerical and throw-weight advantage in missiles, but the US maintains an equally significant counterbalance in areas of key qualitative importance—e.g., missile accuracy, MIRV's, submarine quietness, and underwater technology. Deployment of the 4200 nm SS-N-8 has given the USSR a temporary qualitative advantage. The Soviet Union has developed a new supersonic bomber with intercontinental capabilities, but the United States will continue to retain, for a number of years, a significant advantage in the number of intercontinental bombers and in bomber payload. The US maintains a significant advantage in ABM technology, but the USSR has an operational ABM system and is continuing its research and development on new systems. The Soviet Union has an enormous advantage in air defense, but the US currently maintains the technological and operational capability to penetrate these defenses, should it become necessary to do so.

The advantages in the strategic balance which the United States holds over the Soviet Union are primarily qualitative in nature and are in areas of high technology. For example, our radar technology is still superior to that of the Soviet Union. There are several other areas that could be mentioned, but these technological advantages are transitory at best and are partially offset by the larger warhead yields and missile throw-weight of the USSR. This Soviet throw-weight advantage is important because it facilitates the large-scale MIRV development, already underway at a rapid rate.

These examples are illustrative of the US qualitative technological lead over the Soviet Union in areas impacting on the strategic balance. The Interim Agreement does not constrain either the Soviet Union or the United States from pursuing new technology nor does it limit modernization of strategic systems as long as the quantitative restraints are observed and the size of the ICBM silo launchers are not increased significantly. The relative military strategic balance is currently in equilibrium, but dynamic and fragile. The essential equivalency necessary to the preservation of peace is, therefore, neither self-perpetuating nor permanent.

GENERAL PURPOSE FORCES

The dynamic equilibrium now existing between the United States' strategic forces and those of the Soviet Union increases significantly the importance of US general purpose forces (including theater nuclear forces) in the deterrence of conflict below the level of strategic nuclear war. Neither the US nor the USSR will be capable in the foreseeable future of executing a disarming first strike. Under these circumstances, as vital as they are in maintaining an overall deterrent to major conflicts, strategic nuclear forces are less likely today to deter the lesser forms of conflict than in the days of our overwhelming nuclear superiority. Therefore, ready, mobile, and versatile general purpose forces, sufficient to provide a deterrent of their own, must continue to be one of our prime objectives and concerns.

Detente, as we have seen this past year, does not mean the absence of tension between the US and USSR, nor does the positive improvement in our relations with the Peoples Republic of China mean that the possibility for conflict in Asia has been removed. Economic imbalance, political ambition, social upheaval, resource demands, and military adventurism remain among the potential causes of war, hopefully, continued diplomatic efforts ultimately will be able to establish a world order capable of settling all disputes through political and legal mechanisms without force or the threat of force. Until that time, the United States and its allies must remain fully prepared to protect and defend our vital interests wherever and whenever threatened by those who would be our adversaries. Our ability to protect these vital interests in military situations, short of strategic nuclear war and particularly at the lower end of the violence spectrum, depends to a great extent on our general purpose forces.

Significant US and USSR Initiatives—General Purpose Force Systems

The principal US and USSR general purpose force initiatives are shown on Chart 3. There are other important ongoing programs, of course, which could be listed for both the US and USSR, but these are believed to be the most significant. You should note that nine of the Soviet systems listed have progressed to the point of deployment, while only two of the US systems are in that category. Recognizing that legitimate disagreements may exist over which general purpose systems should be included on this chart, the emphasis displayed by these newly deployed Soviet systems clearly illustrates the broad scope of USSR general purpose force modernization. The list also reflects our limited ability to detect research and development on Soviet general purpose force systems.

The Soviet Union, despite the clear commitment it is making to the major modernization of its strategic offensive forces, has not neglected general purpose force modernization. New tanks, aircraft, and ships are being developed and deployed, apparently as a long-range, sustained, and deliberate "across the board" modernization.

A new tank, a new armored fighting vehicle, a new missile system mounted on an existing armored vehicle, and a new assault helicopter currently are being deployed with Soviet ground forces. The deployment of a new medium tank, a new fighting vehicle which is air-droppable, amphibious, and equivalent to a light tank, and an armored missile system is consistent with the reliance placed by the USSR on armored and mechanized equipment. These new weapon systems will provide revolutionary improvements over similar existing equipment, but they should not change materially the overall effectiveness of the ground forces.

There are numerous indicators that the Soviet Union has begun to increase its emphasis on improving the capabilities of its tactical air forces to engage in ground-attack missions, particularly in regard to non-nuclear conflict. Convincing evidence of this trend is supplied by the development of the four Soviet aircraft listed on Chart 3.

The FENCER A, for example, is the first modern Soviet fighter to be developed specifically as a fighter-bomber for the ground-attack mission. Although the

MIG-23 (FLOGGER) is capable of serving as an interceptor, it also has an important ground-attack capability. The SU-20 is an improved version of the FITTER B, also with an improved ground-attack capability. The V/STOL fighter is expected to serve as the fixed-wing tactical aircraft for deployment in the new Soviet aircraft carrier. In contrast to the evolutionary improvements of the ground forces, these ongoing tactical air initiatives, when fully implemented, will add significant new capabilities to the Soviet Frontol and Naval Aviation forces.

The deployment of the first Kuril-class V/STOL carrier will add a completely new dimension to Soviet naval capabilities. Although not comparable to the multi-purpose US carriers, with their varied complement of sophisticated aircraft, this class of ships will free USSR naval forces from their dependence on shore-based aircraft. With complementary Soviet programs in underway replenishment ships, command and control cruisers, and amphibious ships, this will further strengthen the increasing capability of Soviet forces to operate worldwide. The other three naval initiatives listed for the USSR also will strengthen this same capability. The Kara-class cruiser and the Krivak-class destroyers are heavily armed ships with impressive arrays of antiship and antiair missiles, as well as antisubmarine sensors and weapons. The Amga-class ships will provide missile support for all classes of ballistic missile submarines, thus potentially improving the sustained effectiveness of these submarines when deployed away from the Soviet Union. It should be clear to all that ships of this size and sophistication are not needed by a navy structured merely for coastal defense.

Turning to the ongoing US initiatives, the emphasis has been placed on major new programs designed to influence our military capabilities in the late 1970s and 1980s. In regard to the US Ground Forces' initiatives, the Army "Big Five" weapons systems have been designed to provide major qualitative improvements in combat equipment for use by ground forces that may be on a battlefield in the 1980s. Superior equipment is indispensable for our ground forces because we plan for them to exploit technology rather than depend primarily upon manpower. The Dragon and TOW constitute a significantly improved family of anti-tank weapons to provide protection to ground force units. TOW is currently being deployed and Dragon will be deployed in the near future with our Army ground forces. A request for funds to provide this same capability to Marine Corps ground forces is contained in the FY 1975 budget. The last item, the CH-53E, is an improved prototype version of the CH-53D helicopter currently deployed in Marine Corps units. It is expected to have the capability to lift over 90 percent of Marine division combat equipment and Marine tactical aircraft without disassembly. No production decisions have been made on any of these initiatives except for the Dragon and TOW antitank weapons.

The first three initiatives listed under Tactical Air Forces are ongoing Air Force programs. The A-10 is an attack aircraft specially designed and optimized for the close air support mission—particularly in the role of defeating enemy armor and providing accurate delivery of ordnance in close proximity to friendly ground forces. A production decision on this aircraft is being withheld until a fly-off has been completed between the A-10 and the in-service A-7 aircraft. The F-15 (Eagle) is an advanced tactical fighter being developed for the Air Superiority mission; but it also is expected to have an air-to-ground capability, with accuracies at least as good as those of the A-7D attack aircraft. As an air superiority fighter, it should outperform any known Soviet fighter aircraft now in service or projected for service in the 1980s. The EF-111A is being developed as a prototype by installing the latest jamming subsystem in the sophisticated F-111A fighter, to provide an important qualitative improvement in the Air Force's manned tactical ECM capability. The Navy's F-14 (Tomcat) is the only Tactical Air Forces' initiative listed which is currently operational. Designed for both fleet air and fleet area defense, the F-14 should—like the F-15—be superior to any Soviet fighter aircraft through the 1980s. The F-14 also has an excellent air-to-ground attack capability.

None of the U.S. ships listed under the Naval Forces' initiatives is currently operational; however, the first three 688-class nuclear-powered attack submarines (SSN) and the first LHA amphibious assault ship should be delivered to the fleet in FY 1975. The 688-class SSNs are expected to be generally qualitatively superior to the best Soviet nuclear-powered attack submarines. With the completion of the five ships in the LHA program, the amphibious forces of the Navy should regain the desired capability of lifting the helicopter and surface

assault elements of one and one-third Marine Amphibious Forces and achieve this in modern 20-knot ships. The last 2 ships listed, the sea control ship and the HARPOON missile-equipped patrol frigate, are to be key elements in providing sea-based air, antiair, and antisubmarine capabilities to small task groups, underway replenishment groups, amphibious assault groups, and convoys that do not have aircraft carriers in company. Both of these new ships will be austere, but adequately, designed to fulfill this important mission of protecting our sea lines of communication in lesser-air-threat areas, freeing our carriers to employ their capabilities in protecting our sea lines of communication in high-air-threat areas.

Overall U.S. and U.S.S.R. General Purpose Forces Balance

Soviet doctrine places great emphasis on the massive use of tanks, armored vehicles, and heavy firepower to win the land battle. Associated with this doctrine, the U.S.S.R. tends to arm its ground with large quantities of weapons and equipment, which we have always considered reliable and serviceable but generally of slightly lower quality than comparable U.S. material.

The U.S. has never attempted to match the U.S.S.R. in quantities of ground force personnel or materiel, but we have taken pride in our superior weapons systems and equipment. Recent evaluation of Soviet tanks, armored vehicles, electronic warfare systems, and missiles leads us to believe that the technological gap is being closed. The Soviet Union, learning lessons from Vietnam, has continued a very deliberate and effective program, both to modernize its ground force equipment and to place large numbers of sophisticated weapons in its ground force units. The U.S. because of its involvement in Vietnam, has been required to expend most of its resources maintaining and procuring current models of weapons and equipment.

U.S. technology is still, by and large, superior; but this new Soviet trend, combined with its already massive quantitative superiority, makes it imperative that we and our allies continue to modernize our ground forces equipment and continue to pursue those potentially rewarding new areas of technology which will become useful in the years ahead.

The increased Soviet emphasis on new tactical aircraft has required a re-evaluation of our estimates regarding the future U.S.S.R. total inventory. Contrary to our estimate last year, the total number of Soviet tactical aircraft is not expected to decline over the next few years and may even be increased.

As already indicated, the Soviet Union appears to be making a determined effort to erase the long-held advantage in the ground attack role held by U.S. tactical air forces. On the other hand, the U.S.S.R. traditionally has emphasized the air superiority capabilities in its tactical aircraft and has gained thereby a clear quantitative advantage and some qualitative advantages in this role. With the deployment of new U.S. and U.S.S.R. aircraft, these differences will tend to narrow; however, I believe that by the end of this decade, U.S. tactical air forces will have a qualitative advantage in both roles if we actively pursue the tactical aircraft modernization programs already underway.

The overall number of U.S. major combat surface ships has dropped to the lowest level since prior to the Korean War, but this trend is being reversed as newer ships are programmed to be delivered faster than the old ships are retired from the active fleet. Similarly, the declining trend of attack submarines is also being gradually reversed by replacing World War II-type diesel-powered submarines with modern nuclear-powered attack submarines.

The Soviet Union currently has about 40 more major combat surface ships than the U.S. and about three times as many attack submarines (including cruise missile submarines). Many of these Soviet ships and submarines are old and undoubtedly will be phased out of the active fleet in the next five years. Major new construction and conversion programs also are underway, however, in almost all Soviet major ship and submarine categories.

In the past, the Soviet Navy general purpose forces have been designed primarily as a *defensive* and *spoiling* force to disrupt our sea lines of communication and obstruct the projection of our military power across the oceans. Today, a new and more offensively-oriented Soviet naval posture is developing. The global reach of the Soviet fleets is being expanded and new emphasis is being placed on projecting military power from the sea as a national policy.

I do not believe that even with these new ships and added capabilities, the U.S.S.R. can match U.S. capabilities to project military power from the sea, although the increasing Soviet threat to our sea lines of communication from

the large and increasingly sophisticated submarine force is of considerable concern. In short, the Soviet naval capabilities are becoming more formidable every year, and we must take note of the increasing frequency with which Soviet naval forces are being deployed to areas of serious international concern. Vigorous modernization of our fleet is essential in order to insure both the success of our forward deployment strategy and our control of the seas along essential sea lines of communication.

CONCLUSION

Prior to the consideration of the ABM Treaty and Interim Agreement by the Congress, the Joint Chiefs of Staff enumerated the following three assurances which we felt must be taken if the United States is to guard against degradation of its national security posture:

Assurance I—"A Broad Range of Intelligence Capabilities and Operations to Verify Soviet Compliance in a Strategic Arms Limitation Environment."

Assurance II—"Aggressive Improvements and Modernization Programs."

Assurance III—"Vigorous Research and Development Programs."

The Joint Chiefs of Staff remain firmly committed to these three Assurances. Assurances II and III are particularly pertinent to this discussion. If we fail to maintain weapons systems technological superiority or if we fail to maximize our military capabilities within the constraints of our international obligations, we will find that the qualitative advantages we now hold will have evaporated and that the United States will be placed in a position of military inferiority, thereby risking both peace and freedom.

In this statement, I have concentrated primarily on the weapons and equipment improvements necessary in our forces. There are important questions about force structure, readiness, reserve forces, and the forces of our allies that also must be considered in the total picture of the worldwide balance of forces. These aspects have been broadly covered in the testimony of the Secretary of Defense, and will be covered in detail in the testimony of other Department of Defense witnesses.

Thank you, Mr. Chairman.

SIGNIFICANT US & USSR INITIATIVES STRATEGIC OFFENSIVE SYSTEMS

US		USSR
	ICBM	
MINUTEMAN III SILO MODIFICATION		SS-X-16 SS-X-17 SS-X-18 SS-X-19 NEW SILOS SS-11 MRV SILO MODIFICATION
	SLBM	
POSEIDON CONVERSION TRIDENT C-4		SS-N-8 DELTA SS-N-6 IMPROVEMENTS
	BOMBERS	
B-1 B-52 MODIFICATIONS		BACKFIRE

CHART NO 1

SIGNIFICANT US & USSR INITIATIVES STRATEGIC DEFENSIVE FORCES

US	ABM	USSR
SPARTAN/SPRINT SITE DEFENSE		2 NEW ABM SYSTEMS
INTERCEPTORS		
		MIG-25 (FOXBAT)
WARNING AND COMMAND & CONTROL		
SLBM WARNING RADAR OTH-B RADAR AWACS		OTH RADAR

CHART NO 2

SIGNIFICANT US & USSR INITIATIVES GENERAL PURPOSE FORCES SYSTEMS

US	GROUND FORCES	USSR
ARMY "BIG FIVE": AAH & UTTAS XM-1 TANK & MICV SAM-D * DRAGON & TOW ANTITANK WEAPONS CH-53E HVY ASSAULT HELO		* NEW MEDIUM TANK * NEW FIGHTING VEHICLE * BRDM- MISSILE SYSTEM * HIND A HELO
TACTICAL AIR FORCES		
A-10 CLOSE AIR SUPPORT A/C F-15 (EAGLE) FIGHTER EF-111A * F-14 (TOMCAT) FIGHTER		FENCER A VGV FIGHTER BOMBER * MIG-23 (FLOGGER) FIGHTER * SU-20 GROUND SUPPORT A/C V/STOL FIGHTER
NAVAL FORCES		
688 CLASS ATTACK SUB LHA AMPHIB ASSAULT SHIP SEA CONTROL SHIP PATROL FRIGATE (HARPOON EQUIPPED)		KURIL CLASS CARRIER * KARA CLASS CRUISER * KRIVAK CLASS DESTROYER * AMGA CLASS MISSILE SUPPORT SHIP

* CURRENTLY BEING DEPLOYED; STILL IN PRODUCTION

MILITARY CREDIBILITY

The CHAIRMAN. Thank you very much, Admiral.

Mr. Secretary, I have been noticing various statements, as well as other items in the press, stating in such a way as to believe that we are hanging on the ropes militarily, that we are unprepared, that we are being exceeded at the critical level, and everything has been tipped, or most everything, drastically in favor of the Soviets. I don't believe a word of it. Just look at our own arsenal and see what we have. I don't believe it.

I am getting down to something concrete now. Recently I read a comment in a column as follows: "Repairing the military balance and restoring the credibility of our war deterrent forces must be the first concern."

This story on the credibility of our Armed Forces says in a way that the credibility has been lost. Do you believe that the statement in this quotation is true, or in any way near true?

Secretary SCHLESINGER. No, sir.

The CHAIRMAN. I think you ought to tell the American people exactly what you believe about it, because they have been told over and over again stuff that I think is junk.

Secretary SCHLESINGER. I think at this time and for the immediate future—at least until 1977, when the interim agreement ends—that we have an appropriate balance of strategic forces. We hope that both sides will exhibit restraint in SALT II, and that the strategic balance will be maintained as a result.

As I indicated earlier, I think we may be a little thin on the general purpose forces side, but I also think we have in this budget the ingredients for the necessary strengthening of those general purpose forces.

The CHAIRMAN. All right. Here is another quotation.

This writer said that during the Middle East crisis in the eastern Mediterranean "a clash would have resulted in an American disaster." He was referring there to their navy and our Navy in the eastern Mediterranean.

Secretary SCHLESINGER. May I comment on that?

The CHAIRMAN. Yes. That is why I brought it up.

Secretary SCHLESINGER. One must always look at the scenario which is assumed. There is a natural prudence in the estimates by some military people and by some non-military people as a result of their proclivity to use what is referred to as the worst possible case. I believe that the assumptions on which a statement such as you read rests include the following features:

(1) That the Soviet Union in such a hypothetical engagement would have had the ability to use land-based aviation around the borders of the Mediterranean, in particular the airfields in the eastern Mediterranean.

(2) That the United States would not have been able to use land-based air under those circumstances, so that the Navy would be forced to defend itself, as it were, without the augmentation of additional capabilities associated with NATO.

(3) That the Soviet Navy under those circumstances, backed up by Soviet air, would indulge in a massive first strike against our fleet without warning.

Given those three assumptions in such a scenario, one can come to the conclusion mentioned. But I think that those three assumptions must be carefully examined. If those three assumptions were invalid, I think that our fleet in the Mediterranean still possessed the edge as compared to the Soviet forces.

The CHAIRMAN. I am certainly encouraged to know how much you have been thinking about those very points, and analyzing them so well.

I am going to give you a chance to comment too, Admiral, in just a minute.

But talking about the land-based air power there around the Mediterranean, unless our NATO allies saw fit to join in the clash with us, there is no way that we have land-based air available there, unless we just went out and conquered some nation and took its land and built the base.

Secretary SCHLESINGER. We are not advocating that policy, Mr. Chairman.

The CHAIRMAN. No. As I say, it is very remote that we could anticipate that and be ready on that front.

Secretary SCHLESINGER. One can always design, Mr. Chairman, the worst possible case which shows the U.S. military forces at a decided disadvantage. What one must also do is to estimate the probability of that worst possible case occurring. In my judgment, the Soviet Union would have been ill-advised to have taken the action postulated in the third assumption, which is a massive initial strike against our fleet and would certainly not have done so, even in the absence of the issue of land-based air to which you refer.

The CHAIRMAN. I think you have certainly made a very fine statement about it.

I have another one here that I just want to bring up as an illustration: "The balance of military power between the United States and the U.S.S.R. is getting more and more disastrously unfavorable to the United States." Do you agree with that statement?

Secretary SCHLESINGER. I think that the trends in recent years have been unfavorable to the United States. But I do not see the basis for the word "disastrously." As you know, the Soviet Union has been increasing its military manpower from 3 million to 3.8 million in the same period of time that we have reduced from 3.6 million to 2.1 million. We have reduced our expenditures in constant dollars by about one-third since fiscal year 1968. The Soviet Union since 1965 has been increasing its expenditures in constant rubles by about 3 percent. The trends are unfavorable to the United States. But we still have, and we can maintain, a rough balance of forces. So, the word "disastrously" seems inappropriate.

The CHAIRMAN. I am certainly glad to get your opinion on those matters and get it out before the American public. And I hope that they will be spread by the media, because I have found out that there is a constant stream of these disastrous paintings one way or another

before the American people. And they keep hearing those things. If they keep hearing those things over and over they will believe them at their worst.

Admiral Moorer, may I call on you briefly? I say briefly, because my time has run out.

Admiral MOORER. First, let me say that I agree with the Secretary's assessment, sir. I would also comment that we already have aircraft in Europe that are available for operating with and assisting the fleet. When one makes an assessment of a hypothetical conflict, he must do it, I think, in terms of the real world. The thought that the Soviets would start another war by an uninhibited surprise attack on the fleet without having in the meantime made all kinds of hostile moves in preparation across the entire scope of Eurasia and the Middle East is not a very real one.

The CHAIRMAN. All right, sir. You said you did agree with the Secretary's statement?

Admiral MOORER. Yes, sir.

The CHAIRMAN. Is there anything further? I have a few more minutes here. Is there anything else you wish to say on that?

Admiral MOORER. No, sir, except that in that situation where you had 2 fleets deployed in an area such as we had at that time, while it is true that the Soviet Union had the highest number of ships—about 90—but most of those—over half of them—were supply ships, boilers, water barges, and things of that kind. The Soviet Union had some superiority in surface-to-surface missiles. On the other hand, we had three aircraft carriers there. So, in looking at this kind of hypothetical conflict, one must take into consideration not just the situation between two fleets, but the entire situation throughout the broad area and the tension existing at the time.

The CHAIRMAN. All right, I thank you. I know it is worth a great deal to have your opinion.

ATTRITION OF SOVIET SHIPS

On page 20 of your statement, Admiral, you say:

The Soviet Union currently has about 40 more major combat surface ships than the United States and about three times as many attack submarines.

And you go on to say:

Many of these Soviet ships and submarines are old and undoubtedly will be phased out of the active fleet in the next five years.

I would like for you, if you could, to file a statement showing how many of those Soviet ships are old and will undoubtedly be phased out.

Admiral MOORER. Yes, sir. In my posture statement I show that.

[The information follows:]

[Deleted.]

AGE OF ACTIVE SOVIET NAVAL SHIPS AS OF JULY 1, 1973

Type	Age in years					Total
	0 to 4	5 to 9	10 to 14	15 to 19	20 plus	
Guided missile helicopter ship.....	1	1				2
Guided missile light cruiser.....	6	5	3		1	15
Light cruiser.....					10	10
Heavy cruiser.....					1	1
Guided missile frigate.....	5	11	3			19
Guided missile destroyer.....	5		5	6	2	18
Guided missile destroyer (SSM).....			1	3		4
Destroyer.....				26	12	38
Destroyer escort.....	7	40	19	20	19	105
Radar picket patrol escort.....				8	2	10
Patrol guided missile boat.....	8					8
Guided missile boat (large/small).....	10	44	73			127
Patrol craft and submarine chasers.....	40	70	20	80	25	235
Motor torpedo boats.....	40	40	40	40	20	180
Mine warfare.....	30	80	60	60	50	280
Amphibious ships.....	28	52	5	20		105
Auxiliaries ¹	27	26	9	6	6	74
Ballistic missile submarines.....			12	8		20
Ballistic missile submarines, nuclear.....	30	2	8			40
Cruise missile submarines.....	2	12		11		25
Cruise missile submarines, nuclear.....	10	20	10			
Submarine, nuclear.....	13	7	10			30
Submarine.....	10	20	45	110		185

¹ These figures reflect major Soviet naval types in the auxiliary category (AEM, AO, AOR, AR, AS). There are over 600 additional ships in this category, generally of lesser size and capability.

The CHAIRMAN. Very fine. We will come back.

My time is virtually up. Senator Taft, may I call on you next, please.

STRATEGIC CHINESE DEVELOPMENTS

Senator TAFT. Admiral Moorer, I have also mentioned in questioning the Secretary a matter of what impact the growing Chinese potential might have on the Russian thinking insofar as the strategic developments are concerned. Would you comment on that? And do you think that the Chinese developments are responsible in part for the decision of the Russians to go ahead with vastly expanding their fleet and also seeming to expand their ground forces?

Admiral MOORER. Sir, first, so far as the Chinese capabilities are concerned, as I said in my statement a moment ago, they are growing at a somewhat slower rate than we estimated a couple of years ago, but nevertheless they are developing a strategic capability, as well as improving and modernizing their air force, their army, and their navy. Now, the U.S.S.R. has maintained for the past few years about 40 to 43 divisions and 1,000 to 1,200 aircraft along the Chinese border. There is no question about the fact that the U.S.S.R. has to take into consideration the capability of the Chinese.

So far as the momentum the Soviet Union has with regard to the new missiles, I think that represents its overall intent in acquiring quantity and quality in its strategic systems vis-a-vis the United States. As the Secretary and I both have said, it is interested not only

in its military capability, but also in how that capability is perceived worldwide by other nations.

Senator TAFT. Thank you very much, Admiral.

CONCEPTUAL RESEARCH

Just one other area of questioning. You talked about specific weapons and how they are going to be used and how they add up. Often, however, it would seem to me that we could learn from history that conceptual changes really have been more important than anything else. While, for instance, on pages 25 and 21 of your testimony you mentioned the ship-to-ship missile potentiality of the Russians, there doesn't seem to be really too much emphasis being put on re-examining the concept of how we use the weapons that we have. Do you anticipate that there will be additional emphasis put upon conceptual research into the budget we are talking about?

Admiral MOORER. Yes, sir. As we move along and technology permits the acquisition of new capabilities and techniques, we must alter our tactics and concept of operations. An example of that is the now-obsolete battleline—ships were right behind each other close aboard. Now ships are spread out over a very large operating area. You never find a concentration of ships in the old manner because of potential vulnerability from new weapons and possible surveillance by the other side.

Senator TAFT. How do you perceive a carrier force lining up against an attack of Soviet vessels with surface-to-surface combat possibilities?

Admiral MOORER. The sequence of events involved would determine the outcome. First, adequate surveillance will ensure that you know where these ships are so the platforms can be destroyed.

Second, of course, is the destruction of the missiles—first, the destruction of the firing platform, and then the destruction of the missiles. Various countermeasures leading to interception of the missiles en route to the target are available and deployed.

Senator TAFT. You don't anticipate that there could be major disruptions of carrier operations, not single carriers, but major night interruptions by attacks of this kind?

Admiral MOORER. Of course, if the ship is hit in certain places it will be disrupted. But the first effort would be toward preventing the firing of the missile in the first place.

In this connection, Senator Taft, we should be prepared to accept higher losses in personnel and all types of weapons in our forces—Army, Navy, Air Force—than we have seen in the past. I think this is simply an historical fact. As the weapons become more efficient, the loss rate will go up. This situation was evident in the recent Middle East war, for instance.

Senator TAFT. Do you feel that we ought to go ahead with further development of surface-to-surface missiles ourselves?

Admiral MOORER. Yes, sir; we are. the Harpoon missile is a missile which is adapted to not only maritime aircraft, but ships and submarines as well.

Senator TAFT. Thank you very much.

The CHAIRMAN. Thank you, Senator.
Senator Symington.

ABM AND TRIDENT PROGRAMS COST

Senator SYMINGTON. Mr. Secretary, in the discussion with Senator Byrd about constant dollars I would make the observation that you are adding increased pay to inflation using the same cost twice. Also you always use 1968 as the year to compare which was the year of the height of the Vietnam war a time when we had the most people out there and were spending the most money. There is merit in somebody saying that while we were trying to beat the Vietnamese, the Soviets were using their own money to improve their forces. It would be interesting to know just how much the arms control disarmament discussion, generally called SALT, is costing our taxpayers. The ABM was sold as a bargaining chip; Trident was sold as a bargaining chip, and this new counterforce targeting is being sold as a bargaining chip. It took us 4 years to win World War II. What we dropped on Germany and Japan in 4 years was one-twenty-fifth of 1 percent in TNT equivalent of what we have in the nuclear stockpile ready to drop tomorrow. Looking at the other vital aspect of true national security, the economic picture, I am worried about still more bargaining chips that pop up regularly and so heavily increase our military cost.

Would you give the committee the total program cost of the ABM, the Trident and this new concept of targeting? You can't do that now, but would you supply for the record?

Secretary SCHLESINGER. Let me take one shot at it.

Senator SYMINGTON. Will you supply all that for the record?

Secretary SCHLESINGER. Oh, yes, indeed.

[The information follows:]

The total acquisition costs for the ABM and Trident are:

	Million
ABM (Safeguard)-----	\$5, 447
Trident -----	13, 937

Estimated total cost of the new programs related to targeting doctrine is \$310.7 million. This includes \$245.7 million (total acquisition cost) for the Command Data Buffer, an on-going program that provides rapid, remote targeting for Minuteman III; and \$65 million in FY 1975 for the following efforts:

- Technology development [deleted] of Poseidon warheads to give SLBMs an increased flexibility;
- Improvements in our ability to detect and process information concerning enemy missile launches;
- Development of a survivable nuclear burst reporting system; and
- Increased data handling and communications capability to improve the flexibility of our forces.

The FY 1975 budget includes \$98 million for Command Data Buffer and the other programs associated with the new targeting doctrine.

Secretary SCHLESINGER. You made some observations, Senator Symington. We do not invariably use fiscal year 1968. Earlier, I compared our current position with fiscal year 1964. We can do that for any period of time that you would like. But I think that by share of the GNP, manpower, and any particular variable that you would like to employ, the costs of the Defense Establishment today are lower than they have been at any time since 1950—on any relative basis.

On the constant dollar estimates, of course, there are always different indices that can be used. But our estimates are put together without double counting and on the basis of consistency.

Whether or not the ABM was an appropriate bargaining chip, of course, is an issue that people will differ on. In my judgment, the fact that we were able to head off major deployment of ABM, which could have cost at least \$30 billion, indicates that the start we made may have been a high pay-off item even in the financial terms to which you alluded. Trident, of course, has been justified not as a bargaining chip, but as part of our modernization program. As a general rule, the best bargaining chip is the perceived willingness of the American public and the American Congress to support our defense capability to whatever extent is necessary.

SUPPORT FOR U.N. COUNTRIES

Senator SYMINGTON. On page 3 of your statement you say, Mr. Secretary: "Not counting the collective security provisions of the United Nations Charter, we are allied to more than 40 nations by nine multilateral and bilateral treaties." For the record, would you supply what are the 40 nations and what are the treaties, and what are, as you say, informal but nevertheless, real commitments toward the nations that we must take into account in our defense budget. Would you also list the number of American military or civilians working for the military in the countries in question.

Secretary SCHLESINGER. Yes, sir.

[The information follows:]

The attached tables list applicable treaties and the parties thereto. It should be noted that several nations are party to more than one treaty. This portion of the response is unclassified. The accompanying U.S. military and DoD civilian employee strengths are as of 30 September 1973, and only the military figures are classified confidential.

The informal commitments that we must take into account in the Defense budget include the public assurances of at least four Presidents of our intent to preserve the security of Israel and to maintain stability in the Middle East in keeping with the 1957 Joint Resolution of the Congress on the Middle East. Security Agreements were concluded with Iran and Pakistan, members of CENTO, based on that Resolution. (For strength figures, see Item 10, attachment.)

We must also take into account the assurance given the non-nuclear nations, when the Nuclear Non-Proliferation Treaty was before the U.N. Security Council, that the U.S. would act, in consonance with the U.N. Charter, to counter nuclear aggression or the threat of such aggression against non-nuclear nations party to the Treaty.

	Military	Civilian		Military	Civilian
1. 1947 Inter-American Treaty of Reciprocal Assistance (Rio Treaty):			5. 1954 Southeast Asia Collective Defense Treaty (SEATO):		
Argentina.....		3	Australia.....		22
Bolivia.....		5	France.....		17
Brazil.....		15	New Zealand.....		1,070
Chile.....		4	Philippines.....		286
Colombia.....		3	Thailand.....		811
Costa Rica.....		1	South Vietnam, Republic of.....	(Deleted)	1,561
Dominican Republic.....		1	United Kingdom.....		
Ecuador.....		3	6. 1951 Mutual Defense Treaty: Republic of the Philip- pines.....		1,070
El Salvador.....		1	7. 1953 Mutual Defense Treaty: Republic of Korea.....		1,222
Guatemala.....	(Deleted)	1	8. 1954 Mutual Defense Treaty: Republic of China.....		181
Haiti.....		2	9. 1960 Treaty of Mutual Coop- eration and Defense: Japan.....		5,881
Honduras.....		1	10. Informal commitments: Israel.....	(Deleted)	1
Mexico.....		1	Iran.....		35
Nicaragua.....		1	Pakistan.....		
Panama.....		3			
Paraguay.....		4			
Peru.....		2			
Trinidad and Tobago.....		1			
Uruguay.....		1			
Venezuela.....		4			
2. 1936 general treaty between the United States and Pan- ama (art. X), entered into force on July 27, 1939.					
3. 1949 North Atlantic Treaty:					
Belgium.....		408			
Canada.....		92			
Denmark (including Greenland).....		4			
France.....		17			
Germany, Federal Repub- lic of.....		12,625			
Greece.....		178			
Iceland.....		127			
Italy.....	(Deleted)	886			
The Netherlands.....		117			
Norway.....		24			
Portugal(includingAzores).....		117			
Turkey.....		354			
United Kingdom (includ- ing Bermuda).....		1,561			
4. 1951 ANZUS Security Treaty:					
Australia.....		22			
New Zealand.....					

Senator SYMINGTON. On page 6 of your prepared statement you say:

The sheer physical threat, as measured by the military capabilities of poten- tial adversaries have actually increased during the last 10 years. At the same time, so have our foreign interests, with expanded external investments. A larger volume of international trade, and growing dependence on raw materials from sources overseas.

Would you describe for the record what investments you are refer- ring to?

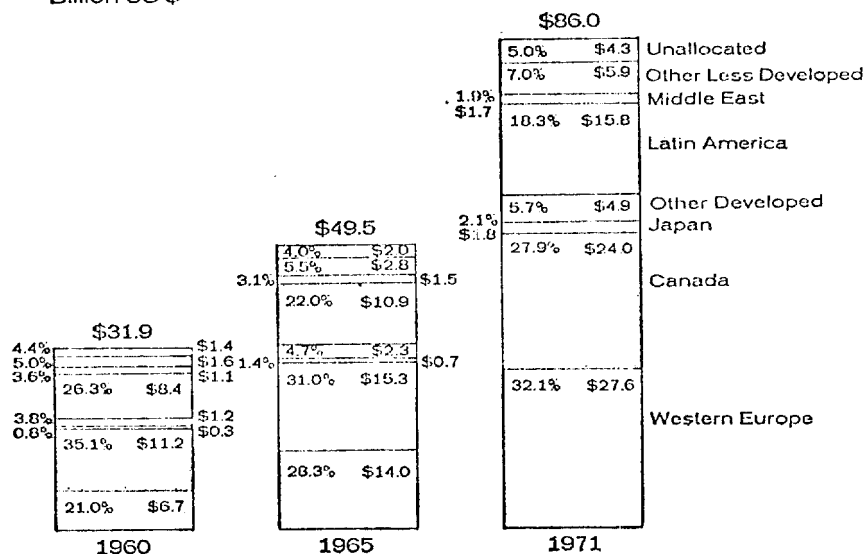
[The information follows:]

U.S. Foreign Investments, 1960-1965 and 1971¹

Figure 33

US Cumulative Direct Investment Abroad

Billion US \$



Secretary SCHLESINGER. Yes, sir.

Senator SYMINGTON. Thank you. Presumably you weren't referring to Chile, were you?

Secretary SCHLESINGER. That is not one that I had in mind.

CIVILIAN LEVEL REDUCTIONS

Senator SYMINGTON. Last year and this year you mentioned the need for some legislation that would enable you to get rid of some unneeded civilians. Have you sent up that legislation, and if so, when did you do so?

Secretary SCHLESINGER. I am not sure that that has been cleared by the OMB as yet. But we will attempt to have that up here shortly, Senator.

The CHAIRMAN. Do you expect that if you get that legislation through you can reduce the civilians?

Secretary SCHLESINGER. Yes, sir.

The CHAIRMAN. But you are adding about 30,000 civilians this year, are you not?

Secretary SCHLESINGER. Yes, sir. Senator Symington, the chairman asked about that in his initial statement. The increase in the civilians is associated with our civilianization program. I have felt that we could reduce the civilian work force of the Department. But it is difficult

¹ Page 57, International Economic Report of the President, transmitted to the Congress March 1973.

to reduce it given the lifetime contract which exists under the civil service system.

Senator SYMINGTON. Thank you.

If, as you say "environment is less hostile," are you still confident of your \$7 to \$13 billion requested increase in the military budget, depending on how you figure the supplementals?

Secretary SCHLESINGER. I think I have reduced that to \$5 billion, Senator. I think that is right. As I have indicated, the main increases here are for readiness and for R. & D. options. The latter may or may not have to be taken up, depending on the outcome of SALT.

Senator SYMINGTON. The taxpayer isn't as well acquainted with those details as you and I, and I am asking for the public record.

SALT II AGREEMENT

Do you think under the philosophy of Dr. Ikle, as he described in an article a year ago last month, there is any real chance of obtaining a meaningful SALT II agreement?

Secretary SCHLESINGER. I most certainly do, Senator.

Senator SYMINGTON. We will see.

We have been awaiting favorable results from MBFR negotiations for many years, to my certain knowledge for at least 8, probably closer to 12. Why do you believe we could expect any success at this time?

Secretary SCHLESINGER. I think there has been a change of conditions in the sense that in the past, there were no negotiations going on, there were just discussions about the possibilities of negotiations. Since October 30 of last year, we have been engaged in close negotiations with the Warsaw Pact as an alliance. And I think that the positions taken by both sides are promising.

OVERKILL

Senator SYMINGTON. On page 9 of your statement you say:

Considering the cuts we have already made, further reductions should now be dependent upon international agreement with potential adversaries.

There have been some cuts in quantity, but as you said, our qualitative position has greatly improved. Do you believe in the theory of overkill?

Secretary SCHLESINGER. Let me answer that very succinctly. No, sir.

Senator SYMINGTON. You don't think there is significance to the fact that, as I mentioned, what we dropped in the 4 years of World War II, all told, is one twenty-fifth of 1 percent of what we have ready to drop today, in TNT equivalent.

Secretary SCHLESINGER. The problem with that is, first of all, we deal now with bilateral capabilities. And we are in a position in which we must be able to survive a first strike and have a meaningful option for the President of the United States. That depends, in my judgment, upon the ability to target certain assets on the other side. Merely taking the Hiroshima bomb, the number of casualties, and multiplying that by the megatonnage in the current arsenal and so forth, is only an interesting arithmetic exercise, and has no strategic significance.

Senator SYMINGTON. I believe it does have some strategic significance, and believe your answer that you don't think there is anything whatever in the theory of overkill is quite a statement in itself.

During the recent Mideast crisis only one country in Europe, Portugal, agreed to give us any help. I understand since then the British offered the use of some bases. But that wasn't known when we had a hearing on this in another committee. The fact we received so little help when we were in deep trouble, trouble to the point where we had to declare a worldwide alert, should this not affect to some extent our military position in Europe?

Secretary SCHLESINGER. The military position in Europe refers, of course, to an attack on one of the members of the Alliance rather than on a country outside of the Alliance, such as Israel. The record of the European allies in the Middle East war is one that I would like to discuss with the committee in classified session. But I should say that some of the allies were far more forthcoming in a quiet way than has appeared in the press.

The CHAIRMAN. Thank you very much. Your time is up.

Senator THURMOND.

Senator THURMOND. Thank you, Mr. Chairman.

SOVIET AIRCRAFT DEVELOPMENT

Admiral MOORER, what evidence do you see that the Soviets are taking steps to upgrade their tactical air force to provide a greater capability in the ground attack role? I am just wondering if you consider the Fencer aircraft of theirs is similar to the A-10?

Admiral MOORER. The Fencer, I believe, is the first aircraft that the Soviet Union has developed specifically as a ground attack aircraft. It is a much larger aircraft than the A-10—more like our F-111. As I said, the Soviet Union had previously emphasized air superiority. It is now developing aircraft which will have much improved capability for the ground attack role.

Senator THURMOND. And the Hind, which is an attack helicopter.

Admiral MOORER. That is right. The Soviet Union is building those at a fast rate. The SU-20, the Flogger; the Fencer A; and the Hind helicopter, are all associated with ground attack or interdiction.

Senator THURMOND. They are taking steps to upgrade their tactical aircraft so that they will have a greater ability in the ground attack role, there is no question with that, is there?

Admiral MOORER. No, sir.

MOBILITY OF MISSILE SYSTEM

Senator THURMOND. In the Mideast war the Soviets gave the Arabs two weapons systems which played key roles. I am speaking of the SAM-6 mobile ground-to-air missile system, and the Sagger antitank missile system which is fired from armored vehicles. Why has the United States failed to develop a system such as the SAM-6?

Admiral MOORER. The SAM-6, as you know, Senator Thurmond, is a mobile missile system which also has a low-altitude capability. Of course, we are going forward with the improved Hawk, a similar kind

of weapon system, which incidentally, did quite well itself during this war. I agree with you, and the Secretary has already said that we are going to concentrate, as a result of what we observed in the Middle East war, in improving this battlefield protection. And so, this is an area which does require attention, and we are doing that, sir.

Senator THURMOND. Do you feel that we can make our Hawk system more mobile?

Admiral MOORER. I feel that we must have systems that are more mobile.

DEVELOPMENT OF STRATEGIC WEAPONS

Senator THURMOND. Admiral Moorer, do we plan to make any changes in our antitank capability by developing a new weapons system or modifying the present system such as the TOW and Dragon?

Admiral MOORER. Sir, the performance of the TOW, I think, is very noteworthy. Although we will, of course, examine very closely the results of the use of the TOW and improve where necessary, we feel that that weapon has been very good indeed.

Senator THURMOND. Admiral Moorer, what do you see as the best course we can follow to avoid being surprised by the Soviets in the area of strategic weapons?

Admiral MOORER. I mention that as one of the assurances that the JCS put forward with respect to SALT I; that is, a capability of maintaining suitable surveillance to determine what improvements, what programs, and what construction are taking place so far as the Soviet Union is concerned.

Senator THURMOND. Admiral Moorer, how does Backfire, the new Soviet bomber, compare with the B-1 as a strategic weapons system?

Admiral MOORER. Sir, it is also a swing-wing, large aircraft. It is not quite as large as the B-1. If the Soviet Union moves forward with a significant tanker program, that would cause us to take an even harder look at what the Backfire might be used for. It can certainly reach without refueling most of the periphery of the NATO nations and China, and with aerial refueling it can cover virtually all of the continental United States.

MINUTEMAN PROGRAM

Senator THURMOND. Admiral Moorer, why has the Defense Department continued to delay our Minuteman III production rather than making a definite decision to conclude it or convert additional Minuteman II's to the MIRV capability?

Admiral MOORER. Sir, this is one of the options, of course, that is associated with achieving this overall essential equivalence. As is the case with the other type strategic systems—the ICBM, the submarine, and the bomber varieties—we are watching the SALT II negotiations. As the Secretary already has said, we will take what action is necessary to maintain this equivalence.

Secretary SCHLESINGER. Senator Thurmond, may I add a word on that?

Our objective with regard to the Minuteman III has been to maintain the line at minimal economic costs given a respectable rate of pro-

duction, until such time as we learn what the result will be of the SALT II negotiations. We are trying to minimize the total production costs while keeping the line alive.

Senator THURMOND. Admiral Moorer, if Soviet missile accuracy reaches a point where our Minuteman forces would become vulnerable, what recommendation would you make to offset this disadvantage?

Admiral MOORER. In the first place, I do not think that in a real exchange anyone knows precisely what the results would be. This is why we have insisted on maintaining a TRIAD: the bomber and the SLBM submarine, as well as the ICBM. If this situation which you assume appears to be, in fact, coming about, then we would have to give consideration to making land-based missiles mobile, or replacing them with some other type of delivery vehicle. But there is no reason for this concern today and for at least several years ahead.

MANPOWER COSTS

Senator THURMOND. Admiral Moorer, as you know, rising personnel costs have reduced our funds for weapons definitely. I have supported the volunteer armed forces on the ground that we could get the numbers that would be qualified, and we could afford it. I believe we can get the numbers, but the questions of getting the quality we need and being able to afford it remain question marks. Do you feel we are significantly weakening our military posture because so many of the defense dollars are having to go to manpower costs?

Admiral MOORER. Sir, without the Selective Service System, of course, there is no alternative to making the pay of the military man equivalent with that of his civilian opposite. I agree with you very strongly that the quality is important, and in some cases, more important than quantity. The quality of the people that are attracted over the years must be watched very carefully. If we cannot reach both of these requirements, quality and quantity, then we would have no recourse but to go back to some kind of mandatory service. I would say at the moment, however, that the indications are that we can acquire a sufficient number of volunteers of the proper quality. This has been our experience recently, but with some minor deficiencies. This is something that, as the Secretary said earlier, we have to watch very closely, and watch those two points. Obviously, if we can't reach the necessary requirements, then we will have to take other steps.

Senator THURMOND. What do you see as the ultimate solution alternative to the manpower cost?

Admiral MOORER. I think manpower costs are a nationwide problem—in and out of the Service. There is no real solution to it in terms of driving the cost of manpower down. Selective Service requires an individual to perform tasks at a wage level less than he could acquire on the outside, thus taxing him and not the Nation. I don't think there is any real solution, particularly in peacetime, to the problem of substantially reducing manpower costs if, at the same time, you maintain the requirements of quantity and quality.

Senator THURMOND. Thank you, Admiral. I think my time is about up.

The CHAIRMAN. Thank you, Senator, very much.

Senator McIntyre.

IMPORTANCE OF R. & D. PROGRAMS

Senator McINTYRE. Admiral Moorer, on page 6 of your statement you state: "In contrast to the Soviet Union's dramatic program, ongoing U.S. initiatives in the strategic arena are modest and deliberate." If we discount those Soviet initiatives which are pointed toward catching up with us qualitatively where we are in the lead, wouldn't that put our program in closer balance, and wouldn't the balance tip strongly in our favor if we examine our respective research and development efforts and give consideration to our strategic cruise missile developments—\$120 million you have got this year on this program—and the advanced ballistic reentry system which has your MIRV going on, and MIRV coming up. Wouldn't the balance tip strongly in our favor once you give up the idea that they are trying to catch up with us qualitatively, if you then take a look at the new areas we are working in?

Admiral MOORER. I think you could draw that conclusion, Senator. But here again we must watch the progress of SALT II. What we are trying to do is to acquire essential equivalence. The United States is making a very honest and straightforward effort to reduce the overall force levels. The Soviet Union certainly is moving forward at one time with four missiles which are, in terms of quality, far superior to the numerically superior ones it has deployed already. All of these things must be looked at in order to arrive at the overall balance. That is why the Secretary made the point, I believe, that every program we start is not necessarily going to go into production. But we need those hedges.

Senator McINTYRE. You are always going to meet that great argument, the sunken cost. You have heard that theory.

Admiral MOORER. Yes, sir.

Senator McINTYRE. That is a tough one to beat in conference on the House side; we have already spent x billions of dollars, and we can't lose it.

CONCEPT OF PARITY

Mr. Secretary, last week the staffs of the four congressional committees responsible for authorization and appropriation of funds for the Department of Defense were briefed on the fiscal year 1975 Defense budget. You appeared at that time and stated in response to a question on bargaining chips for the forthcoming round of SALT talks that the most important impression that the United States could make upon the Soviets is that the Congress and the American people are in complete accord with the policy of this administration concerning further reduction in strategic nuclear weapons based on a concept of parity. You also stated that this would be more significant than merely investing in new developmental programs. If a sense-of-the-Congress resolution stating this position was adopted by both Houses, would you be prepared to terminate, slow down, or defer new strategic developments proposed for fiscal year 1975?

Secretary SCHLESINGER. I would have to take a look at the details of that resolution, Senator. Let me try and amplify my remarks to ensure that they are precise.

What I did say was that the most important bargaining chip is the evident will and determination of the American public as expressed through Congress, which is far more important than the acquisition of specific weapon systems. I also indicated at that time that if the Congress were to authorize the Department to spend \$15 or \$20 billion for the necessary R. & D. without going ahead on deployment before coming back each year and telling the Congress what the state is of the Soviet program, and what steps the United States would have to take to match it and maintain essential equivalence, that would be a very powerful bargaining chip, and more so than the deployment of forces and the purchase of additional equipments.

I think that I should emphasize that I was referring to deferring deployment rather than the necessary R. & D. on capabilities.

Senator McINTYRE. I don't want to take too much time. But you have made it very clear that one of the most important things for SALT is that the American people back this budget request of yours.

Secretary SCHLESINGER. I was not making a budget plea at that time; I was making a general observation.

Senator McINTYRE. I thought that was a very strong thing, to get across the word that we not be second. I believe Admiral Moorer said, "Tom, if you are going to be second, you might as well be 15th."

I want to ask you, please pay attention to the fact that if the sense of the Congress resolution backed up the need for parity, would that affect some of your thinking, if the American people were behind it?

Secretary SCHLESINGER. It might well, Senator.

Senator McINTYRE. If you have any other thoughts on that question I would appreciate it if you would provide them.

Secretary SCHLESINGER. Yes, sir.

RETARGETING

Senator McINTYRE. You mentioned that retargeting does not require increased accuracy.

Secretary SCHLESINGER. That is correct. The change in strategic doctrine does not require increased accuracy.

Senator McINTYRE. I want to be sure you said that, because a question is coming up. You mentioned that retargeting does not require increased accuracy—

Secretary SCHLESINGER. The change in targeting doctrine rather than retargeting.

Senator McINTYRE. All right. If this is so, why develop increased accuracy, since, as you well know—and it scares some of us—this could be interpreted by the Soviets as a destabilizing move and a turn toward first strike capability. Wouldn't this invite an acceleration of the strategic arms race?

Secretary SCHLESINGER. Senator, I do not think that it would invite an acceleration of the strategic arms race. I think that accuracy in itself should not be made the culprit or the symbol of the inability of either side to acquire a first strike disarming capability. As I indicated earlier, a first strike disarming capability is, for better or worse, beyond the reach of either side. We have treated accuracy as a symbol of the inability and the unwillingness of either side to reach for a

first-strike disarming capability. Accuracy itself would help substantially and it would augment the change in targeting doctrine. But it is not essential for that change, although it does improve the performance—

Senator McINTYRE. I think that may clarify your case a little. I am not sure yet.

NAVY FIGHTER PROGRAM

Admiral Moorer, I want to ask you a question. Why is there a need for the Navy to begin developing a low cost fighter when the Air Force lightweight fighter program can be used as a basis for both services?

Admiral MOORER. I think here again, sir, this is simply a multiple development hedge to see whether it is possible to acquire a capability of this kind at a lower cost.

Perhaps the secretary wants to comment on that.

Senator McINTYRE. We will try to put them together.

Secretary SCHLESINGER. I think that is an excellent question, sir, and we shall continue to look at the two programs simultaneously.

Senator McINTYRE. It is the greatest thing in the world, Mr. Secretary, to try to get these services to get together. They like to get together, but when they do they start to fight and compete against each other.

Secretary SCHLESINGER. It may be the greatest thing in the world, but it is not the easiest thing in the world.

B-1 PRODUCTION DECISION

Senator McINTYRE. On the B-1, I think it is a fair question, but probably Secretary McLucas would be better. But I am going to ask you, Mr. Secretary, because it does involve something that we fellows who fool around with this R. & D. stuff and try to understand it are getting confused about. I am sure you will get confused before you get through with it too. You have stated that there has been no production decision on the B-1 promise, nor is any required this year. You have also stated that you adhere to the fly-before-buy policy for weapons system procurements. The Air Force, however, advises that fiscal year 1975 budget includes funds for either B-1 aircraft to be configured as a production aircraft and to be later included in the operational inventory. The program as previously structured was presented as a fly-before-buy program. Does DOD plan to have a firm procurement policy for all programs, or will each program be fitted with a procurement policy of its own? And as I go by this, I am thinking of what you did on Sam-D.

The last part. If this new B-1 aircraft and another one planned for fiscal year 1976 by the Air Force are to be configured as production aircraft, then they will probably require—look out—production-type tooling and engineering. How much of this production-type effort do you plan before making a production decision?

Is that a fair question?

Secretary SCHLESINGER. That is an absolutely fair question, Senator. I agree with the thrust of your comments that we should not uncon-

sciously make a production decision and drift through the acquisition of production tooling while we are still in the R. & D. stage. I think that is an excellent question and its thrust is correct. I am not prepared to answer it with a detailed response at the moment, but we shall review the program so that what you were suggesting—that we not drift into a production decision more or less inadvertently—does not arise.

Senator McINTYRE. You know what you have done to Sam-D. I don't say that in fighting mood. But you have said, now, let's go out and prove this missile.

Secretary SCHLESINGER. Yes, sir.

Senator McINTYRE. It was kind of a shock. But I buy it. But I see on the B-1 that is not to be the case.

Secretary SCHLESINGER. No, sir.

Senator McINTYRE. That is how you get me confused.

Secretary SCHLESINGER. Your point is well taken. Sam-D is an example of a program that was preceding to systems acquisition prior to the resolution of the technological uncertainties. However, we held the program back so that we could resolve those technological uncertainties prior to a decision to go for a system. In all cases, the B-1 included, we reserve the decision to procure until these uncertainties are removed. We think it is necessary for the United States to understand these technologies. Similarly, for just the reasons that you are setting out, we ought not to drift into a premature production decision on the B-1.

EFFECT OF CHINESE THREAT

Senator McINTYRE. I will just ask this for the record, because I think it ought to be on the record. How do you see, Mr. Secretary, the evolving Chinese ICBM threat impacting on the ability of the Soviets and the United States to agree on limiting or possibly reducing ICBM and SLBM forces?

Secretary SCHLESINGER. It is not a favorable development, Senator. Many of the studies of arms control by the arms control community have presupposed a two-man game, as it were. The addition of a third party is a destabilizing element. If, for example, both the United States and the Soviet Union were to desire to have equality with two major opponents, you would have, arithmetically or mathematically the portents for an astronomical growth in strategic requirements. I think this is an issue that is not disturbing in the short term, because the Chinese capability remains relatively small compared to the capability of the two major states. But in the longer run, it is a subject that is disturbing, and we have not got a method of grappling with it as yet.

Senator McINTYRE. I agree. And I think that I forget this—I tend to look at our "friends", the Soviets, as a potential foe—please God, never—and forget that it is a double problem.

Thank you very much, Mr. Secretary.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you.

Senator Byrd.

Senator Byrd. Thank you, Mr. Chairman.

ESCALATING PERSONNEL COSTS

Admiral Moorer, you know I am a strong advocate of a strong defense. I believe it is vital. What concerns me about our defense budget is that when we compare 1974 with 1964, this has been a tremendous increase of about 70 percent or more in the budget. But only 3 percent of that increase in cost has been for weapons acquisitions, for procurement, for military construction, and for R. & D., for the investment part. Another way of saying it, 97 percent of the total increase has been for personnel costs, maintenance, and operations. Is not that something to be greatly concerned about for the future?

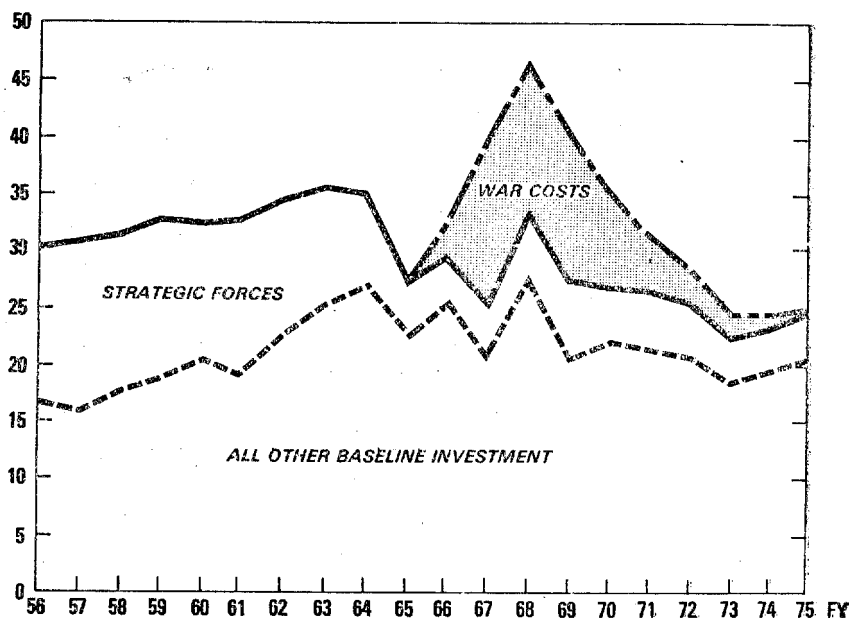
Admiral MOORER. I certainly agree with you, Senator Byrd. Here again, the Soviets do not have the same problem. This means that for equal budgets they are in a position to make a much larger investment for equipment.

Secretary SCHLESINGER. Senator Byrd, may I amplify on that comment?

In 1964, we had a fairly high procurement year, associated primarily with acquisition for the strategic forces. We are now attempting to keep a lid on the strategic forces. And if you look at the baseline investment, shown on this chart, we are not in as bad a position compared to 1964 for the general purpose forces.

CHART NO 3

INVESTMENT OUTLAYS IN CONSTANT (FY 1975) PRICES



We do have an aging problem, which is a source of concern. It would be a major source of concern only if the failure of SALT were to result in significant new expenditures on the strategic forces. But the acquisition, as you can see in that earlier timeframe, was to a large extent devoted to strategic forces, whereas today our acquisition of strategic forces is quite limited.

Senator BYRD. Put it another way, then. Take today's budget and just compare it with itself, so to speak. A relatively small percentage of that is going to R. & D. and procurement, around 30 percent. But you don't feel that is a cause for concern?

Secretary SCHLESINGER. We would, of course, prefer that the price relationships were different. We do not feel that it is appropriate now to tear down the force structure further. Consequently, we must moderate our pace of modernization. I think you were quite right in raising questions about that. We believe we have an optimal balance in the program between modernization and the retention of force structure.

Senator BYRD. Can you project what the defense budget might be in the period 1976 to 1980?

Secretary SCHLESINGER. Assuming a relatively favorable settlement at SALT, I think we would wish to maintain roughly the present force structure. This implies an escalation each year in terms of price and pay of about 6 to 7 percent. That would mean that we would have an increase of \$5 to \$6 billion a year.

Senator BYRD. If there were no SALT agreement?

Secretary SCHLESINGER. If there were a SALT agreement.

Senator BYRD. \$5 to \$6 billion each year compared to the previous year.

Secretary SCHLESINGER. Yes, sir.

Senator BYRD. Because the personnel costs have increased so much, and the ratio of personnel costs to the total budget is so high, should not the services be able to get along with less personnel because presumably with the higher pay scales you should be able to get better qualified personnel? Are you frozen at 2.1 million for military personnel and 1 million for civilian personnel?

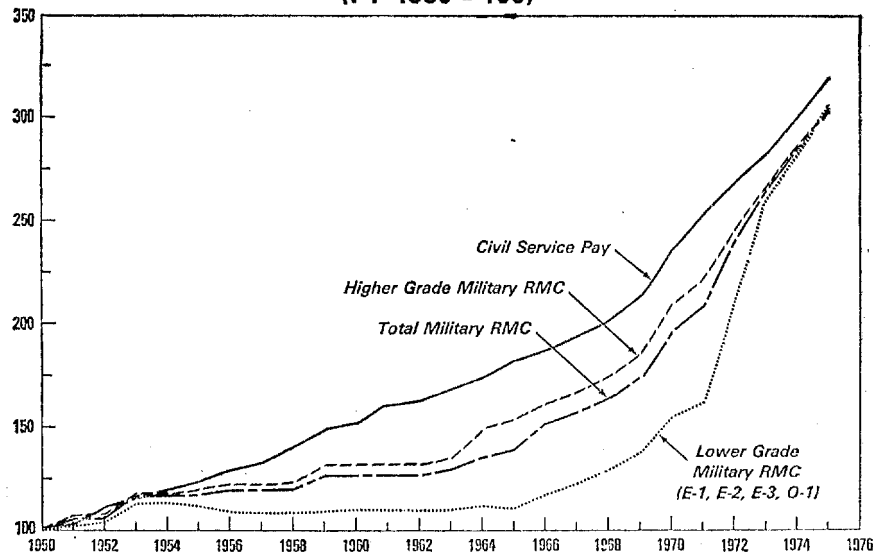
Secretary SCHLESINGER. No, sir. As I indicated earlier, I think that some reductions could be made on the civilian side if there were greater flexibility in that area. I think we should be cautious about reducing our military manpower further. Prior to the Vietnam war, we maintained approximately 2.7 million men under arms. We have dropped back to about 2.1 million. And we have reduced the force structure. As I have indicated, I think that the force structure is a little thin on the general purpose forces side. But what we are trying to do is to convert some of the bodies that we already have into combat capability.

Senator BYRD. With the substantial increase in pay, is it not logical to assume that you get better qualified people, and would need to have less personnel as a result?

Secretary SCHLESINGER. The increases in pay, Senator Byrd, primarily fall under the heading of catch-up. From the time of the Korean war until 1967, approximately—

Senator BYRD. I understand all that. But the fact is that there has been a very substantial increase in pay. And what I am asking is, should not that result in getting better qualified individuals?

**REGULAR MILITARY COMPENSATION AND
CIVIL SERVICE PAY RATES
(FY 1950 = 100)**



Secretary SCHLESINGER. As is shown on this slide, the pay increase simply compensates for the increase of pay elsewhere. If you study the chart, we had a major lag with regard to lower rank military personnel, both on the officer side—lieutenants—as well as E-1's, E-2's, and E-3's. Civil Service pay has been way out in front of military pay, even higher grade regular military compensation. What we have done recently is to catch up with a period of time—a decade or more—in which we did not allow junior personnel to participate in the gains of the economy.

Senator BYRD. I am not critical of that at all, and that isn't the point I am suggesting.

Secretary SCHLESINGER. I think the answer is, "No," we do not feel we are going to get higher quality personnel unless we are to increase pay factors even more than we have.

Senator BYRD. Thank you.

Thank you, Mr. Chairman.

Secretary SCHLESINGER. I am sorry to say that, Senator. I wish it were otherwise.

Senator SYMINGTON [presiding]. Senator Thurmond.

Senator THURMOND. Thank you, Mr. Chairman.

FORCE LEVEL REQUEST

Mr. Secretary, in your statement you describe the fiscal year 1975 military manpower request as baseline force levels below which we should not go. Why are these particular levels so vital to our defense?

Secretary SCHLESINGER. As I indicated, Senator Thurmond, I believe that we have become a little bit thin on the general purpose forces side.

I would prefer to see our general purpose forces a little bit more robust than they presently are. For that reason we are attempting to convert existing manpower in the support side into combat capability without increasing aggregate manpower. My main concern is that by thinning out our conventional forces too much, the United States and its allies would, under certain circumstances, be forced to have too early a recourse to nuclear weapons. I think that is a decision that we should seek to postpone as long as possible by a robust general purpose force capability. I think that we are now on the thin side.

Senator THURMOND. Mr. Secretary, are you confident that these levels in the Active Forces can be maintained under a no-draft environment?

Secretary SCHLESINGER. We have been doing well these last 3 months, Senator. Prior to those last 3 months, the Army was making about 85 percent of its quota. If it regularly made only 85 percent of its quota, we could not maintain these forces. We have indicated that we cannot guarantee success, but we think that we probably can maintain the 2.1 million men.

REDUCTION IN RESERVE LEVELS

Senator THURMOND. Mr. Secretary, why have Guard and Reserve strength levels declined along with the regular force levels?

Secretary SCHLESINGER. There are two reasons for that, Senator. One is reflected by the question you asked previously. The disappearance of the draft has weakened incentives to join the Guard and Reserve Forces. As a result, we have had some reduction in the Reserve ground forces.

This is a reflection of the fact that, in this environment, we are unable to obtain the number of recruits that we might have hoped for on the Reserve Forces side. That is one issue.

The other issue with regard to the reduction of Guard and Reserve Forces refers to the air defense problems that I mentioned this morning. Given the Soviet capability, air defense seems to have low pay-off as a way of protecting the United States against devastating nuclear attacks. We have reduced our air defense capabilities in both the Active duty Forces and the Reserve Forces.

Senator THURMOND. Do we have adequate incentives to attract the Guard and Reserve members?

Secretary SCHLESINGER. I believe that the results indicate that—we are not able now, with the incentives that we have, to attract the numbers that we might have hoped for into the Guard and Reserves.

JUSTIFICATION OF CIVILIAN PERSONNEL INCREASE

Senator THURMOND. Mr. Secretary, what is the military force level in the fiscal year 1975 and the payroll cost? I have a figure here of about 2.2 million people, and \$19 billion is the cost.

Secretary SCHLESINGER. That is straight military personnel compensation. Our total costs of people amounts to 55 percent of the budget request of \$92 billion, which is about \$50 billion.

Senator THURMOND. What is the civilian personnel level in the Department of Defense for 1975, and what is the payroll cost?

Secretary SCHLESINGER. The civilian personnel level is approximately 1 million people, and the payroll cost is approximately \$15 billion.

Senator THURMOND. I have about \$14 billion. So it is approximately correct.

Mr. Secretary, on what basis do you justify an increase of 30,000 civilian personnel in 1974? And I believe you have covered that partially. But how would you explain that to the public—how would we explain it?

Secretary SCHLESINGER. There were two aspects to it, Senator Thurmond. One is the civilianization program, by which we are attempting to turn some jobs that previously were performed by military personnel into civilian jobs. This partly reflects some difficulty in acquiring the appropriate number of recruits for all of the jobs. Also, the Civil Service provides you with greater stability in many jobs. This has caused an augmentation of our civilian work force.

Senator THURMOND. In effect, if you have reduced the military personnel, which I believe you have, but you are increasing the civilian personnel, you really don't bring about very much reduction, do you?

Secretary SCHLESINGER. That is correct, not in the aggregate. We are saying two things. First, that some of the jobs previously held by uniformed military can be performed by civilians. Second, that we probably can reduce the civilian payroll, but not efficiently under the existing statutes governing retirement.

Senator THURMOND. Mr. Secretary, what jobs were civilians doing in the military system that could not be performed at less cost by military personnel?

Secretary SCHLESINGER. To give a complete answer, I would have to submit that for the record, Senator Thurmond.

[The information follows:]

When we were drafting people, we would from time to time get draftees with a high degree of skill in some expensive specialty, such as mathematicians and computer programmers. When we then used those people in those specialties, we obtained their services at far less cost than that of a civilian of comparable talent. But those are exceptions and, in any event, irrelevant today. We have paid close attention to the relative costs of those military positions which have been converted to civilian during the past decade; on an average basis the consequence of the conversion has been a saving to the Department of Defense and an even larger saving to the Government as a whole. We have done this through analysis of the military and civilian grades, and the differential costs attributable to each. On a position-by-position basis, the net cost/savings has typically come to near zero, but the extra reduction in military strength has always produced a net saving. This is the pipeline support (principally trainees) required for the military but not for the civilian work force. Thus, if we convert 1,000 military jobs, we would increase the civilian force by 1,000 but we would cut the military force by about 1,200. Those extra 200 reductions in military strength make the difference. In the present substitution program, we plan to do the same type of analysis on a specialty-by-specialty basis. We may find some specialties wherein military personnel are less costly but expect that their number will be small.

Senator THURMOND. Mr. Secretary, DOD strength levels have drained, but personnel costs still amount to around 56 percent of the Defense budget. I believe you said 55.

Secretary SCHLESINGER. Yes, sir.

Senator THURMOND. I have the figure of 56.

Secretary SCHLESINGER. I think it is down just a trace this year, a few tenths of a percent from fiscal year 1973.

Senator THURMOND. Do you feel that the personnel costs are stabilizing at this level?

Secretary SCHLESINGER. Yes, sir. We hope to hold it in this range.

Senator THURMOND. Is there any way to get any assurance of doing that?

Secretary SCILLESINGER. No, sir. I think, though, that if there were another move in the arms race and we were forced to acquire weapon systems more rapidly than we presently are, we would reduce the relative proportion of personnel costs.

PREPARED QUESTIONS FROM SENATOR THURMOND

Senator THURMOND. Mr. Secretary, I have some questions here on air defense that I think are right important, but rather than to take the time of the committee, if it meets the approval of the chairman, I will just pass them on to you and let you answer them for the record.

Senator SYMINGTON. Without objection.

Senator THURMOND. Thank you very much.

[Questions submitted by Senator Thurmond. Answers supplied by the Department of Defense.]

Question. In view of the reductions in our Air Defense forces proposed in the budget, how much Air Defense do you feel is necessary to protect against a bomber attack?

Answer. Surveillance and peacetime control of our airspace and warning of a bomber attack are the primary missions of the CONUS air defense force. For the airspace surveillance and control mission, a force of about 200 interceptors properly deployed around the periphery of the country appears to be sufficient. Although we are not structuring our force to accomplish bomber defense, the planned force will provide defense against a limited attack, e.g., one mounted from a neighboring country such as Cuba. Furthermore, in a crisis our CONUS air defense force, augmented with general purpose forces, may provide limited defense against bomber attacks such as those that could be mounted by the Soviet Union. Maintaining air defenses which could effectively defend against Soviet bomber attacks, however, is not sound or feasible in an era of large Soviet ballistic missile forces against which we cannot defend.

Question. What savings are being realized by these reductions?

Answer. Although not all the scheduled CONUS air defense reductions will be completed during FY 1975, we expect savings of about \$70 million in FY 1975. Once the reductions are completed, we expect even greater per year savings, or about \$760 million over the FY 1975-1979 period.

Question. Is AWACS being developed and procured for the Air Defense role?

Answer. AWACS is being procured primarily for control of our theater offensive and defensive air forces. When not deployed overseas in support of our theater forces, the AWACS aircraft are to be assigned to a general purpose pool, and therefore, should be available for continental air defense. However, the number available in the United States at any one time will be variable.

Question. How many AWACS planes are to be bought and what is the total R&D and procurement cost of this program?

Answer. We tentatively plan to buy a total of 34 AWACS aircraft (including the three refurbished DT&E aircraft). We plan to purchase 12 aircraft per year beginning in FY 1975. In considering production, each annual procurement would be considered as a separate block of aircraft as well as a separate decision. We estimate total RDT&E costs to be about \$1.2 billion and, assuming 34 aircraft are bought, the procurement costs would be about \$1.3 billion.

Question. Will tactical aircraft, as opposed to interceptors be used for Air Defense? How many?

Answer. Potentially, all tactical and training resources in the United States are available for continental air defense in times of crisis. However, some of these resources are scheduled for deployment overseas in support of our overseas commitments, and may not be available for CONUS air defense. We anticipate that 200-300 Air Force, Navy, and Marine Corps aircraft normally sta-

tioned in CONUS could be committed to CONUS air defense if no units are deployed overseas. If some units are deployed overseas, 100-200 aircraft will be available in CONUS to augment our air defenses.

Question. Does DOD plan to buy any F-15s or F-14s for the Air Defense mission? How many?

Answer. We are not now planning to buy either the F-14 or the F-15 for the CONUS air defense mission. Since these aircraft are being bought for fleet and theater air defense, we will continue to have the option to procure additional aircraft of either type for the CONUS defense role. Further, some F-14 and F-15 units will be stationed in the United States, and may be available to augment the CONUS air defense force if needed.

Question. Is the NORAD or ADC headquarters being reduced because of the Air Defense cutback?

Answer. No. In June of 1973, these two headquarters were consolidated as a part of a management improvement program. A manpower savings of 904 spaces, including ten general officer and twenty-six colonel positions, was accomplished. Because of the phase-out of Nike-Hercules surface-to-air missile forces from the Strategic Air Defense Mission, the Army plans to deactivate the Army Air Defense Command (ARADCOM) and its headquarters at Colorado Springs. This deactivation, based upon the Air Defense cutback, should result in further reductions to the CONAD Headquarters staff. No further reduction in the Aerospace Defense Command (ADC) headquarters is planned at this time.

Question. Can the Air Defense mission be fully met with the forces remaining after these force level reductions?

Answer. Yes. Surveillance and peacetime control of U.S. airspace can be fully met with the CONUS air defense forces remaining after the reductions.

Question. What missile will replace the Nike-Hercules missile in the continental Air Defense role?

Answer. We are not now planning to replace the CONUS air defense Nike-Hercules missile units that are being phased out because surface-to-air missiles are not needed for airspace surveillance and control.

Question. Where will SAM-D be used for Air Defense, in the United States or Europe?

Answer. SAM-D is being developed principally for field army air defense. It would be deployed primarily in support of U.S. Army units overseas, with most of the overseas deployments providing air defenses for our forces stationed in Europe. However, about one third of the SAM-D fire units probably would be based in the continental United States. If available, they could be used for Continental Air Defense.

Question. Are the trained manpower resource in the Air and Army National Guard units being converted to other roles?

Answer. In the Army National Guard, we have authorized the retention and application of the technician spaces made available as a result of the Nike-Hercules reductions to other areas of the Army National Guard where technician shortages exist.

In both the Army and Air National Guard, every effort is made to place excess technicians against other known vacancies. Civil Service reduction in force procedures apply and, where technicians cannot be placed in other jobs, separation allowances are paid.

Military paid drill personnel are authorized and encouraged to transfer first to other Guard units, and second to other Reserve Component activities within reasonable distance of the reservist's residence.

The Army Guard units themselves are deactivated and cease to exist since, at the present time, there are either no other roles or equipment available to assign to these units. Under these circumstances, there will be some loss of skilled personnel.

Although the current program calls for Air National Guard Fighter Interceptor Squadron deactivations, we are studying roles and missions for these units. This is also being considered by the OSD Study Group for the Guard and Reserve in the Total Force.

Question. Recognizing Air Defense is a mission particularly suitable to the Air Guard, have you considered transferring more of the remaining units from the Regular to the Guard? Would this be cheaper?

Answer. Yes, we have considered transferring some of the remaining Air Defense units to the Air National Guard and have determined that the current force mix provides the most suitable Air Defense posture through FY 1975. We have retained an option to reexamine the Air Defense force structure by keeping six squadrons of F-101s in the ANG inventory during FY 1975, squadrons which we had earlier planned to eliminate.

We have achieved cost reductions through elimination of the F-102s in FY 1975.

It may be possible to achieve further cost reductions by transfer of some of the remaining Active force F-106s to the Air National Guard.

In any event, the force mix of Air Defense interceptors between the Active and the Air National Guard will be that mix we determine to be the most effective and economical within the constraints of prudent risk.

Question. Has a definite study been made to determine what roles now being performed by the Regulars could be transferred to Reservists and Guardsmen?

Answer. No, but in August 1973 I directed that a Study of the Guard and Reserve in the Total Force be undertaken. This study, which includes considerations of availability, force mix, limitation and potential of the Selected Reserve in a national emergency, specifically addresses the task of identifying Active force missions which are economically and militarily suitable for transfer to Guard and Reserve forces. The study will be completed in the fall of 1974.

NUCLEAR CONFRONTATION IN NATO

Senator SYMINGTON. Mr. Secretary, once tactical nuclear weapons in Europe have been used, presumably in a possible conflict with the Soviet Union, do you believe the war could be prevented from escalating to a nuclear exchange on a strategic level?

Secretary SCHLESINGER. It could be, Senator. It all depends on the circumstances.

Senator SYMINGTON. At what level of confrontation do you believe there can be a natural and well-recognized division line?

Secretary SCHLESINGER. I am sorry, Senator, did you say division line?

Senator SYMINGTON. Yes.

Secretary SCHLESINGER. I think for that to occur, nuclear weapons would have to be employed in small numbers, and in clearly defined localities, rather than generally.

Senator SYMINGTON. Could you give us an example of possible scenarios of (1) surgical strategic strikes; and (2) a tactical nuclear war in Europe that would not result in escalation to an all out nuclear exchange between the United States and the Soviet Union?

Secretary SCHLESINGER. Yes, sir, but I would prefer to do that in classified session.

Senator SYMINGTON. What is your estimate of the collateral damage to the civilian population that would result from the limited surgical exchanges just noted?

Secretary SCHLESINGER. I would have to provide you with data elsewhere. Did you say civilians?

Senator SYMINGTON. Yes.

Secretary SCHLESINGER. That could range in the area of the tens of thousands.

Senator SYMINGTON. We had some hearings in the Joint Atomic Energy Committee with the premise there was or would be a clean bomb.

Secretary SCHLESINGER. I think there is no clean bomb. There are bombs that are cleaner than others, but there is no clean bomb.

Senator SYMINGTON. That is why I asked you about the collateral damage to the civilian population.

Secretary SCHLESINGER. Yes, sir.

Senator SYMINGTON. Thank you. How much money is requested in the fiscal 1975 budget to implement this counterforce doctrine?

Secretary SCHLESINGER. Our request for the retargeting capabilities is in the order of \$100 million.

Senator SYMINGTON. Not in billion?

Secretary SCHLESINGER. No, sir. I am referring to the strategic data.

Senator SYMINGTON. Would you give us the estimated figure?

Secretary SCHLESINGER. Yes, sir.

[The information follows:]

The FY 1975 Defense Budget includes \$33 million to complete development and to continue procurement of the Command Data Buffer; and \$65 million for the following development efforts:

- Technology development [deleted] of Poseidon warheads to give SLBMs an increased flexibility;

- Improvements in our ability to detect and process information concerning enemy missile launches;

- Development of a survivable nuclear burst reporting system;

- Increased data handling and communications capability to improve the flexibility of our forces.

Senator SYMINGTON. Thank you. Is it planned to improve the accuracy of both the Minuteman and Polaris Poseidon as well as to provide a retargeting capability for those two components of the TRIAD?

Secretary SCHLESINGER. If you permit me to answer the following question, we would be improving the retargeting and the accuracy of both ICBM's and SLBM's, not necessarily the Poseidon or the Polaris.

COUNTERFORCE STRATEGY

Senator SYMINGTON. What effect do you believe this newly announced counterforce strategy will have on any possible success at SALT II?

Secretary SCHLESINGER. Senator, may I emphasize once again that we have no announced counterforce strategy, if by counterforce one infers that one is going to attempt to destroy silos. We have a new targeting doctrine that emphasizes selectivity and flexibility. But counterforce as it is usually interpreted—going after a large array of strategic nuclear targets—is not our intention. Consequently, I would expect that our new targeting doctrine would not have an adverse effect on SALT II. Any discussion is open in SALT II that will restrain the overall capabilities of the two sides. We are prepared to restrain our own capabilities, and we trust the Soviets are equally willing to restrain the growth of their capabilities.

FRENCH SUPPORT IN NATO

Senator SYMINGTON. I have some questions on Diego-Garcia, but will get into those in the supplemental.

You advised we go over and look at our forces in Europe. I have been going over nearly every year since 1950. I was shocked, as I am sure everybody else was who was interested in our position in Europe,

when the French pulled out. Do you believe our forces in Europe today, without the support of France in NATO, constitute a true shield?

Secretary SCHLESINGER. Yes, sir.

Senator SYMINGTON. Do you think we have got enough room to manipulate armies without the French?

Secretary SCHLESINGER. I don't think we have enough, but I think the Soviets, looking out at 700,000-plus men under arms west of the Elbe, regard that as a formidable deterrent. As long as the Soviet marshals are not in a position to give a high confidence of success estimate to their colleagues in the Politburo, I think that is an indication of the relative effectiveness of our conventional shield.

PROJECTED GNP

Senator SYMINGTON. I don't understand that.

You say in your statement: "The fiscal year 1975 budget outlays continue for the second year to claim less than 6 percent of the gross national product." What do you estimate the gross national product will be for 1975?

Secretary SCHLESINGER. It will be about \$1.4 trillion. I can insert the precise number in the record.

Senator SYMINGTON. 1.4 trillion?

Secretary SCHLESINGER. The GNP estimate for fiscal year 1975 is \$1,455 billion.

ADDITIONAL DIVISION

Senator SYMINGTON. What contingency is needed for the additional one-third division that is being set up.

Secretary SCHLESINGER. As I have indicated, I think that we have been on the thin side and that the reduction of our force structure on the general-purpose forces side has been taken because of budgetary pressures rather than because of the contingencies that we faced. I think the additional one-third division is related to our overall posture, notably the conventional reinforcement in Western Europe.

Senator SYMINGTON. Has there been any change in our M-60 tank position as a result of the Mideast War?

Secretary SCHLESINGER. Yes, sir, and when you deal with the supplemental request you will see a reflection of that change.

ATTACK HELICOPTER

Senator SYMINGTON. Would you file for the record the definition of an attack helicopter?

Secretary SCHLESINGER. Yes, sir.

[The information follows:]

An attack helicopter is one which, because of its armament and weapons, provides antitank/antivehicle, and antipersonnel capabilities in support of infantry and armored units.

Senator SYMINGTON. Is the Sea Control Ship an aircraft carrier?

Secretary SCHLESINGER. It carries aircraft. I regard it as a mini-aircraft carrier. I am not sure that Navy people regard it as an aircraft carrier.

Senator SYMINGTON. Admiral, I would ask some questions of you on these matters, but didn't see your statement before you came up today.

Are the characteristics of the Harpoon classified that you referred to?

Admiral MOORER. Some of the performance is, yes, sir. But the fact that there is a Harpoon which can be adapted to aircraft, ships and submarines is not classified.

STOL AIRCRAFT

Senator SYMINGTON. Is the military working, Mr. Secretary to get a STOL?

Secretary SCHLESINGER. The answer is yes. We can give you a more precise answer on the record.

Senator SYMINGTON. Will you do that?

Secretary SCHLESINGER. Yes, sir.

[The information follows:]

Yes. The major military STOL effort is directly associated with the VSTOL programs. The useful payload of VTOL aircraft such as the AV8-A and the XFV12-A increases rapidly when a short rolling take off is permitted. This additional payload capability is considered in developing mission profiles and capabilities. STOL payload is not a design requirement however, since the VTOL vertical lift and controllability dictate the aircraft design.

Senator SYMINGTON. If something to this end isn't done it will be the first time that I know of where the military obtained a fallout from a commercial venture.

COST OF RECRUITING EFFORT

In your statement you say we must recruit "one of every three eligible and available men." Do you think we can do that?

Secretary SCHLESINGER. I am hopeful, Senator.

Senator SYMINGTON. Have you a record of the cost of your recruiting effort, including the advertising?

Secretary SCHLESINGER. We can insert that into the record.

Senator SYMINGTON. Would you do that?

[The information follows:]

RECRUITING/ADVERTISING BUDGETS¹ FOR ACTIVE DUTY PERSONNEL FISCAL YEARS 1973-75

[In millions of dollars]

	Fiscal year—		
	1973	1974	1975
Army ²	135.1	181.1	196.3
Navy ³	92.8	105.1	110.3
Marine Corps.....	37.8	40.6	40.8
Air Force.....	56.1	63.5	61.6
Recruiting station leases ⁴	13.7	13.5	28.5
DOD advertising fund.....	0	3.6	8.0
Total.....	335.5	407.4	445.5

¹ Excludes operation and personnel expenses for AFES.

² Includes funds for unit of choice recruiters and a reprogramming request for fiscal year 1974 which has not yet received final DOD approval.

³ Includes funds to recruit 2 by 6 reservists and certain support funds for other Naval Reserve programs.

⁴ Army acts as executive agent for leasing program. Increase in fiscal year 1975 is due to the enactment of Public Law 92-313 which affected the transfer of GSA funding for recruiting leases to Army and levied additional user charges for stations occupying Government space.

MENTAL ABILITY OF RECRUITS

Senator SYMINGTON. You say—and this is only for information—that at least 82 percent of all new enlistees will be of average or above average mental ability, and at least 55 percent be high school graduates. How do you figure 82-percent average or above average?

Secretary SCHLESINGER. The 18 percent refers to mental group IV.

Senator SYMINGTON. Would you supply information on this for the record, the percentage of that group in the Army 5 years ago, and what it is today, and what it is extrapolated to be 5 years from now.

Secretary SCHLESINGER. Yes, sir.

[The information follows:]

In 1969, all new male accessions into the Military Services were tested on the Armed Forces Qualification Test. The AFQT was a 50-minute test to measure military trainability. Since the end of the draft, the Military Services have moved toward the use of more comprehensive aptitude test batteries for determining eligibility for military service, enlistment guarantees and assignment to military occupations. For comparative purposes, these new aptitude tests are now converted to the old mental groupings. The data for the Army for the first seven months of FY 1974 show that 19% of its new enlisted accessions were in mental group IV. In FY 1969, 28% of Army enlistees and inductees were mental group IVs. The proportion of mental group IVs enlisted five years from now is estimated to be about 18%.

Senator SYMINGTON. Do you recommend altering any of the rules of comparability in military pay?

Secretary SCHLESINGER. I think, Senator, that it would be premature for me to answer that question. I shall study it and give you a response. That is something that deserves careful study.

[The information follows:]

We submitted a legislative proposal in March 1973, recommending a modification of the present method expressed in law for the allocation of matching pay increases for military personnel. It was introduced in the Congress in September, 1973, as H.R. 10370. Experience since submission of that legislative proposal indicates needed improvement in the bill of both a technical and substantive nature. We are preparing a revised proposal which would modify and correct last year's recommendation. We expect to submit our revised proposal in the near future.

Senator SYMINGTON. Thank you, Mr. Secretary.

TRIDENT PROGRAM

How do you justify your fly-before-buy position when you are purchasing 10 Trident submarines at some \$1,300 million a piece before you have completed one?

Secretary SCHLESINGER. The reactor of the submarines, or course, has been prototyped. The development of the hull is a straightforward technological development. I think the question of the state of the art applies primarily to the missile rather than to the ship itself.

Senator SYMINGTON. So your answer is?

Secretary SCHLESINGER. My answer on that is that the degree of prototyping in advance is dependent upon the degree to which one is pushing the state of the art. For that reason, one should follow a strict fly-before-buy policy with fairly sophisticated aircraft. With other kinds of developments that do not push the state of the art, one can ameliorate the requirements.

Senator SYMINGTON. So you don't think there is any dichotomy in the Trident program and the fly-before-buy policy?

Secretary SCHLESINGER. That would be overstating it, Senator. I think you have put your finger on something of a dilemma, and I tried to answer that without defining that there is a dilemma.

Senator SYMINGTON. Thank you, Mr. Secretary.

The CHAIRMAN [presiding]. Again, I will be quite brief here.

CAPABILITY OF OUR NATO ALLIES

Mr. Secretary, on page 6 of your statement you say in effect that the capability of our allies in Western Europe has remained essentially constant. I am pro NATO, but I want to ask you to just open up and tell us what you know on this. If there are any facts now that indicate that there is a growing threat, sober threat, why aren't those allies doing more to increase their capabilities? In other words, somebody is mistaken about this threat. If it is as bad as you gentlemen think it is—and I know you think it is that way—those people that live closer to it, it seems to me, would have at least as firm and as strong ideas about it, and would be scurrying around doing more about it. You are a man that is quick to grasp things. You have been in the Pentagon several months now. What is your idea about this?

Secretary SCHLESINGER. Senator, I can only point to the fact that there is a difference between the logical inferences that the Europeans might draw and the psychological forces at work.

Let me say with regard to their capabilities that on the one hand they have not increased their force structures. However, there is a substantial upgrading program in terms of the equipments which are resulting in larger budgets. This program has not been sufficiently rapid for our satisfaction.

There is a tendency, I think, to say that the Soviets are so formidable that there is no point in doing anything; that whatever the allies do, the Warsaw Pact will dominate them.

Under those circumstances there is some large-scale tokenism on the part of our allies, who put up forces sufficient to keep the Americans happy and to retain an American presence in Europe, but which is not devoted to counterbalancing the forces to the East. And I think that psychology is changing—I hope it is—but I cannot report complete success.

The point you are making is very well taken. The only answer is, in part, that, given the interdependence of all of our western society, the allies must perceive the need and be willing to make the sacrifice in order to get the end results that you refer to.

The CHAIRMAN. I don't remember that I mentioned this to you gentlemen or not. But we want to have a special hearing where some of you put it together with reference to the lessons you learned from this war, about weapons, and all. And I hope we don't run into a situation where one service thinks one thing and one another. We can't decide that as between services. But what is the changed situation—at least have a statement upon which there is agreement, and then below the line you can put the disagreement.

Secretary SCHLESINGER. Yes, sir.

Admiral MOORER. Mr. Chairman, I don't think there is any disagreement with respect to the lessons learned. We would be very happy to supply it. It is in my military posture statement, which will be submitted later.

[The information follows:]

MIDDLE EAST

No discussion of the relative military posture between the US and USSR would be complete without an analysis of the recent conflict in the Middle East; its genesis, lessons, and consequences in terms of US interests in the area.

Strategically, the Middle East is important because of two major factors—one geographical and the other geological. Geographically, the Middle East is the corridor connecting the Eastern Hemisphere's three major continents, it is the avenue through which a Soviet strategic line of communication to the Far East may be established. The advent of supertankers and intercontinental aircraft may have lessened the area's geographical importance, but certainly has not eliminated it. In addition, the eastern Mediterranean is vital to the defense of NATO's southern flank. Geologically, the primary resource of the Middle East is oil. Middle East oil supplied 13 percent of pre-boycott US demand, 75 percent of Western Europe's, and 85 percent of Japan's. Within the next decade, there is not likely to be significant diminution in the dependence of the industrialized West and Japan on the Middle East. Prior to initiation of the President's Energy Program, projections indicated that the US could require Middle East oil to fulfill over 30 percent of our needs in the 1980's. One-third of the non-Communist world's supply of oil is projected to come from Saudi Arabia and Iran alone.

Superimposed on these strategic considerations is the longstanding political commitment made by both the Congress and the President to the survival of Israel. The credibility of this commitment, like all other U.S. international obligations, depends on the proven past record of performance by the United States, including the performance of our Armed Forces. Further complicating the situation is the fact that the area is the birthplace of three of the world's great religions.

It is against this background that the varied, compound, and interdependent objectives of the United States must be viewed. Peace and stability are our principal national objectives, and defusing the Middle East crisis is central to global security. This point, where the interests of major powers converge, has all the necessary ingredients for being the cockpit for great power confrontation; and yet, there are political and military forces at work well outside the scope of the usual "Communist" and "Free World" interface. The area threatens to be the "Balkans" of the late 20th Century.

Second only to peace is the crucial need to insure access for both the U.S. and her allies to the energy resources of the area. Until substitute energy sources are established, we will remain dependent, in part, upon oil from the Middle East. Also present here is the potential for divisiveness which could damage severely the cohesion of the Atlantic community and U.S.-Japanese relations. The fragmentation of U.S. alliances which could result from the issue is a matter of grave concern. Since diplomatic efforts to reduce this potential divisiveness continue.

A further U.S. goal remains the denial of hegemony over this strategic area by the Soviet Union or any other power with interests inimical to the United States—ambitions not unknown to Russian history. Domination of the area by such a power would endanger NATO's southern flank, reduce U.S. mobility, and endanger our lines of communication. It also would sever the economic and military relationships we have so carefully nurtured in the interest of the region's stability, progress, and independence.

On October 6, 1973, the diversity, turmoil, mutual fear, and mistrust, rampant in the region, again passed over the threshold of semi-controlled tension—neither war nor peace—into conflict for the fourth time since Israel's founding. A combined Arab force of over 2,000 tanks and 100,000 infantry, engaged an as yet not fully mobilized Israeli force of about 400 tanks and 5000 infantry, simultaneously, in the Sinai and on the Golan Heights. The conflict was violent and costly. The supply and re-equipping of the Arab states by the Soviet Union is estimated to have cost in excess of \$2.6 billion. Efforts to insure an uninterrupted flow of

supplies to Israel during the conflict in order to maintain a balance of forces in the area, resulted in U.S. expenditures of about \$1 billion, including airlift operating costs of \$42 million. Congress promptly enacted an Emergency Security Assistance Act providing \$2.2 billion for Israel. When the ceasefire became effective on October 24, 1973, the Israelis held the dominant terrain in the Golan Heights and a sizable new segment of Syrian territory. On the Sinai front, Israel had established a bridgehead across the Suez Canal and nearly surrounded the Egyptian 3d Army of about 25,000 men. The Soviet Union had a naval force of 96 ships, including 29 modern surface combatants and 23 submarines, in the Mediterranean—at their peak strength—a force equal to the total number of such ships operated out of home waters by the USSR worldwide in 1969.

There has been much commentary and repeated analysis of this conflict, a great deal of which would give the impression that a new era of warfare has been entered and that the "lessons learned" are of such significance that new military texts are required. In my view, this impression is unjustified. Time-honored strategic and tactical concepts have been underlined, reinforced, and footnoted—not repealed or replaced. These footnotes to military history are, however, important and worthy of consideration.

First, ready, in-being, deployed forces are essential to maintaining the territorial integrity of any area whose defense is required. The October War presented striking illustrations of two considerations which traditionally have supported this concept. The Israel Defense Force (IDF) intelligence organization possesses a well-deserved reputation for excellence; yet, the attackers were able to achieve almost complete strategic surprise. They masked their preparations behind a facade of routine exercises, a carefully executed political deception plan, a cloak of secrecy, and good communications security, including extensive secure landline communications.

Military capability has been described as being the product of men, material, and morale, with the result that as any one factor approaches zero—capability approaches zero. This war, like most, was decided primarily by the impact of leadership, ability, and training.

The IDF faced a force with qualitative and quantitative advantages in equipment, quantitative advantages in personnel, and the benefit of tactical surprise. The attacking force executed a thoroughly rehearsed simple plan and gained their initial objectives. However, the IDF ultimately achieved dominant positions on both fronts.

Adaptability and flexibility of leadership were characteristics very apparent in the IDF. The initiative displayed by officers of all ranks was often the key to success. IDF doctrine requires commanders to stay forward to "read the battle." Although the price was high, the advantages gained through decisive leadership at the critical moment made the losses worthwhile. On the other hand, the Egyptians and Syrians were well trained in manning Soviet equipment and executing Soviet tactics.

This conflict reaffirmed that in the last analysis, the success or failure of an investment in national security depends upon the ability to attract to the service of the country (both active and reserve) outstanding young men and women who will rise to positions of military leadership responsibility. There is a difference between leadership and management. Leadership is of the spirit, compounded of personality, vision, and training. Its practice is an art. Management is a science and of the mind. Managers are necessary; leaders are indispensable. We, too, must continue to create and inspire military leaders—junior and senior.

Additionally, the classic doctrine that the priority of employment of air assets must be given to gaining and maintaining air superiority over the battlefield has been proven once again. Today, gaining air superiority includes defeating enemy SAMs in detail. Until enemy air defenses are degraded, any application of aerial firepower will be costly, but the losses will go down as air defenses are taken out. This was made clear during the LINEBACKER II operation in North Vietnam and again during the Middle East War. In the interim, ground forces must be capable of fighting with reduced reliance upon close air support. This can be accomplished by continuing to equip and maintain a balanced, mutually supporting, combined arms team of infantry, artillery, and armor.

The Soviet Union has devoted considerable effort toward development of a SAM and AAA capability, and in both Vietnam and the Middle East, has demonstrated a willingness to deploy SAMs and AAA extensively outside the Soviet Union and Warsaw Pact countries. The surface-to-air arsenal provided to the Arabs includes

SA-2, SA-3, SA-6, and SA-7 missile systems; 57mm, 85mm, and 100mm guns with FIRE CAN fire control radar; and ZSU-23-4, ZPU-4, ZPU-1, and 37mm plus smaller crew-served weapons and individual weapons. In both Egypt and Syria, SAM systems were well forward, with many firing units located within about 50 km of the line of contact. Additionally, massive numbers of SA-7 missiles (both hand-held and possibly mounted on BRDMs) and AAA guns were in the same area. Supporting these weapon systems was a surveillance radar system providing complete overlapping coverage at all altitudes. This defensive belt was both dense and thick. In order to achieve air superiority in the face of such defenses, it is necessary to avoid, suppress, or destroy such systems. ECM and the ability to locate and destroy mobile SAMs must be modern and sophisticated. Standoff weapons can play a major role in this effort. The Air Force is applying special management emphasis to the accelerated development and procurement of systems to suppress air defense.

On the other side of the coin, we know that a land army can provide initial defense against a modern tactical air attack by extensive employment of mobile, integrated surface-to-air missile system; but for defense in depth, these ground force weapons must be complemented by air superiority fighters. We are developing, therefore, a program to provide a more mobile, capable, and responsive family of battlefield air defense weapons and are reexamining deployment tactics and the basis for determining surface-to-air launcher levels.

Finally, the lessons and impact of the war with regard to direct US operations should be addressed. Three facets are of particular concern; supply levels and production base, mobility, and operating bases.

The enormous expenditure of missiles, artillery shells, and anti-tank munitions, together with the level of equipment attrition, demonstrates once again the necessity of maintaining ample stocks of conventional munitions and equipment.

Difficulties experienced as a result of providing moderate quantities of equipment and munitions to Israel have emphasized the magnitude of worldwide deficiencies in the level of arms, munitions, and war material maintained by the United States. These serious shortages of specific types of munitions are compounded by distribution problems and inadequate storage facilities overseas. Critical shortages of equipment and secondary items exist. New requirements from future crises in Southeast Asia, the Middle East, or elsewhere for similar support would further complicate the problem and could degrade significantly our conventional deterrent.

The conflict once again demonstrated that an efficient logistic system is the backbone of any sustained combat capability. If we are to provide our forces with that degree of material readiness sufficient to conduct a conventional defense in NATO or elsewhere and to provide our allies with the ability to defend themselves, we must quickly build up inventory levels for all items of supply and equipment in conjunction with establishing warm production bases for selected high consumption items. We anticipate establishing a CONUS-based stock of munitions and equipment which can be used to support allies under emergency conditions, and improving and enlarging storage facilities for prepositioned war reserve stocks overseas in order to improve short-term response capability and to relieve the immediacy of the demand for airlift/sealift in the event of hostilities.

The Soviet Union again demonstrated its increasing capability to project its influence and military power strategically beyond its contiguous borders. For the first time, this was accomplished by a rapid, continuous airlift coordinated with an impressive sealift. The threat to the peace of the world has been increased by this newly portrayed capability to introduce and maintain some of the most sophisticated Soviet weapons far outside the land mass of the USSR.

Effective strategic movement of war materials depends upon the complementing capabilities of airlift and sealift. We must retain the capability to respond rapidly with airlift to move personnel and essential supplies and equipment, and to provide sealift capability for the non air-transportable equipment and heavy tonnages required for sustained operations.

U.S. resupply of Israel demonstrated the excellent capabilities of the C-5A and C-141. Over 500 total sorties insured an uninterrupted flow of essential supplies while the conflict continued. Increased numbers of outsized and oversized aircraft are essential if we are to achieve the airlift capabilities necessary to support our NATO commitment and to support the national policy of providing

the material necessary for our partners to repel aggression, using their own manpower in their own defense.

Sealift and protection of sea lines of communication are also essential to both contingency and follow-on support operations. The airlift mounted in the Middle East conflict received well-deserved praise. Not so well publicized is the fact that from October 6, 1973, to date, sealift accounted for over 70 percent of the total tonnage moved. In order to reestablish and maintain an effective strategic movement capability, sealift forces must be augmented and modernized as a necessary complement to strategic airlift. This must include maintaining and modernizing sufficient naval escorts and carrier task forces to protect these sealift forces enroute. We also must continue to insure that our naval forces are capable of responding as fully and rapidly as they responded to this crisis.

Finally, the issue of operating bases must be faced. The United States was disappointed, but not surprised, when some of our allies did not perceive their national interests as being identical to ours. Without the cooperation of Portugal, which consented to the use of Lajes, the resupply operation which made Israel's survival possible could not have been conducted without great hazard and almost prohibitive cost. The world has shrunk in political terms, but it is still just as many miles from a U.S. depot in Arkansas to the Middle East as ever. If we are to be able in the future to respond to a call for help of the nature and magnitude of the Israeli operation, we must continue to develop and invest in secure bases, where we can operate as free of foreign political constraints as possible, while still maintaining our alliance system. The best runway, storage facilities, geopolitical location, or deep water port is of little utility if political constraints preclude its use.

Ultimately, the issue is whether the United States can afford to rely solely upon the good faith of others when it is believed that the vital interests of the United States or of one of its allies are in imminent peril. If we are to rely on our ability to respond to conflict as a deterrent, then we must face the consequences of forward-basing U.S. air, ground, and sea forces in areas where our important interests may be altered by military or political compulsions beyond our control. In the long run, assuming we maintain the proper mix of ready, mobile, and versatile general purpose forces, these consequences of forward-basing will pose far fewer dangers for the U.S. than would the withdrawal of these forward-deployed forces.

The CHAIRMAN. That is fine. But I think we get a whole lot more from briefing on special problems that way, and testimony, we can call it testimony, and put it into the record, than we do by the repetition of the hearings, from this one on a lot of it would be repetition.

Senator THURMOND, I will call on you next.

Senator THURMOND. I have no further questions.

The CHAIRMAN. Senator McIntyre.

Senator MCINTYRE. On the supplemental request, this includes an item of \$217.6 million.

SUPPLEMENTAL R. & D. REQUEST

Senator Symington, you will be interested in the supplemental; you are going to handle it. There is an item in there of \$217 million for R. & D. Half of this is for civilian pay raises pursuant to law, but about half, \$108.5 million, is to improve the future readiness of our forces.

In the past, Mr. Secretary, except for SALT I, and Southeast Asia's operational requirements, and classified pay raises, research and development did not meet the criteria for supplementals. This is because the period of time required to develop equipment is too long to meet an early operational need, and because the few months gained by seeking a supplemental, instead of inclusion in the next year's budget, would have little if any effect on the ultimate availability of that

equipment. Moreover, even if a case could be made for any or all of the readiness items which you have in there, there are sufficient funds on low priority items within the \$8 billion available for 1974 that re-programming would satisfy the need. Do you agree with that statement?

Secretary SCHLESINGER. I agree with that statement in part, Senator.

Senator McINTYRE. In part?

Secretary SCHLESINGER. Yes.

Senator McINTYRE. What part do you disagree with?

Secretary SCHLESINGER. I think the issue of the items included here should be examined on their merits. We have had an experience in the Middle East that suggests certain potential deficiencies in our forces. For example, the air defense suppression problem is one that comes to mind. As a result of those experiences, the sooner we get started on that problem, the better. I think you will want to review with your group the items in that list and come to a conclusion on the merits of those items.

Senator McINTYRE. Have you read Representative Stratton's report, had a chance to just run through it?

Secretary SCHLESINGER. No, sir.

Senator McINTYRE. You should do it. The TOW missile was never used in operation. They tried it out.

Secretary SCHLESINGER. It was used operationally, but I will deal with that in classified session.

Senator McINTYRE. OK, you know more than I do, then.

But the thing that interested me in just passing, it said that the Israelis had trouble with a TOW on a night proposition. So for something like 10 bucks they put it on the TOW and got night vision operation on the TOW missile. And I don't know, in R. & D. we are trying to spend quite a bit of money to try to find the answer for a night vision device for the TOW missile. I may be barking up a tree that is wrong, but I am going to pursue it.

Secretary SCHLESINGER. You may be barking up a tree that is right, and we should pursue it.

Senator McINTYRE. I hate to think that somebody could make something for \$10 that we are spending thousands for.

I am not going to argue with you too much on the Trident submarine, and the R. & D. The missile guidance system installed in the hull is not a low-risk technology that we are trying to develop here.

Mr. Chairman, this year in R. & D.—and I am not an opponent of R. & D., don't get that idea, we just try to take a hard look at it—and there is an awful lot of stuff to look at this year—comparing the fiscal year 1974 appropriation of \$8.1 billion for research and development, your request for \$9.3 billion for 1975 represents an increase of 15 percent. It is also the largest amount ever requested for this appropriation. Why is so large an increase required in 1 year? You think it is that urgent, apparently. But briefly, why have we got a jump of 15 percent in 1 year?

Secretary SCHLESINGER. I think, Senator, I would prefer to avoid discussing these matters in terms of percentile increases. I think that one would have to review the individual programs, and if the aggregate of those individual programs makes sense, that that is sufficient justification. If they do not make sense, any arguments about a 15-

percent increase or a 10-percent increase or a 20-percent increase do not make sense.

Senator McINTYRE. We don't have the staff or the time to take a look at all our R. & D. programs, we can only pick and choose, a few here and there. So some of them go through the wringer and get away from us.

Last, when the Trident program was presented last year the Navy estimated that \$1.7 billion would be required in fiscal year 1975. The current request for 1975 is for \$2.2 billion, or \$4,500 million more. Can you explain this major increase?

Secretary SCHLESINGER. I cannot.

Senator McINTYRE. For the record.

Thank you, Mr. Chairman.

[The information follows:]

Last year, in the FY 1974 Budget the FY 1975 program acquisition cost of Trident was estimated at \$2.4 billion; \$1.759 billion for the submarine and \$.667 for the missile. Now, the FY 1975 estimate is \$2.0 billion; \$1.381 billion for the submarine and \$.661 billion for the missile.

The R&D request for the submarine has remained essentially constant, changing from \$.108 billion to \$.107 billion. However, the building rate for the submarine has been modified from 1-3-3-3 starting in FY 1974 to 1-2-2-2 starting the same year. This schedule change results in a lower procurement estimate of \$1.167 billion rather than the \$1.453 billion estimate of last year. Military Construction estimates have decreased from \$.198 billion to \$.107 billion.

The R&D request for the missile remains essentially the same, decreasing from \$.652 billion to \$.649 billion. The change in procurement funding is minor, reducing from \$.015 billion to \$.013 billion.

Thus, the only major change in the FY 1975 estimates relates to the slowing of the submarine production rate, from 3 to 2 per year beginning in FY 1975.

The CHAIRMAN. Thank you, Senator.

Senator Symington, did you have something more?

Senator SYMINGTON. Mr. Chairman, I would thank the Secretary and Admiral Moorer for their courtesy and tolerance in answering the questions. The only way you can get the facts is to ask the questions.

I would say one thing in support of Senator McIntyre's position as chairman of the Subcommittee on Research and Development. The first year Dr. Foster was the head I was sympathetic with the rise in the cost of research and development. But over the years little or no hardware came out of the other end, for at least the last 5 years. Some of us have been saying that we get the arguments around here while the Soviets get the hardware. The best illustration, off the top of my head is the fact a Navy plane, not designed as an air superiority fighter because it was two-seated, was laid down in 1954. Nevertheless, it was such a good plane that as of now, today, the F-4 is still the best plane we have in service certainly in any quantity, for that particular job. At the same time at least 5 years ago I had in my office photographs of 13 different Soviet fighters developed during that period.

So I would hope Senator McIntyre, when he asked the question, what do we need that money for, would remember that, \$9.4 billion is a lot of money to put in research and development. If you coordinate that situation with the fact there is a growing lack of truly independent scientists, independent from the Pentagon, as the defense budget increases by billions, we are running into a real problem.

Thank you, Mr. Chairman.

The CHAIRMAN. Yes, sir. Thank you.

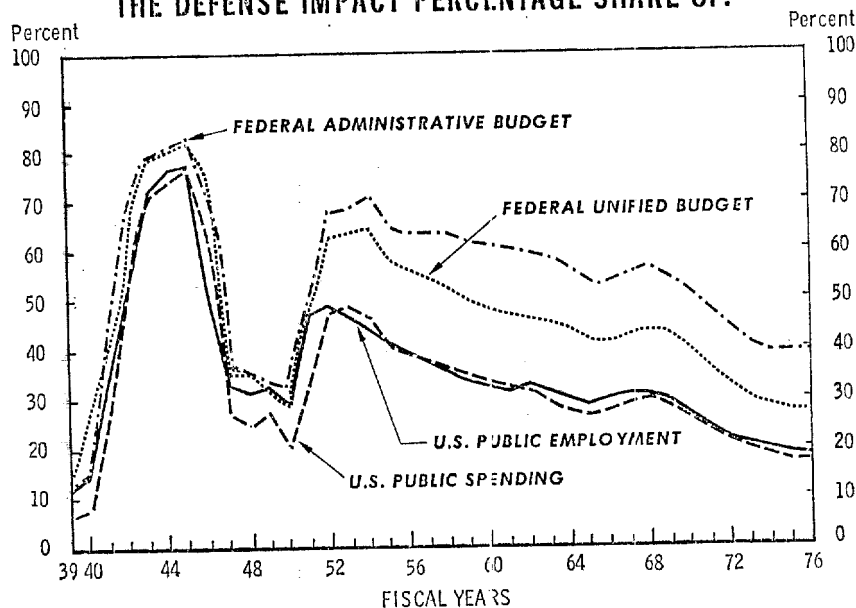
DEFENSE SPENDING AS PERCENTAGE OF FEDERAL BUDGET

Mr. Secretary, here on page 13 of the statement—and I just have this one question—up at the top of the page you were comparing the 1975 budget with the 1964 budget fiscal year each time. I direct your attention to the last part of that sentence, quoting: “And continue also the declining trend of Defense spending as a percent of the total Federal budget, at 27.2 percent for fiscal 1975.”

I know somewhere in here we started adding in the trust funds, like the social security money, for instance, and erroneously calling that part of the budget. When we say budget, I think it is highly misleading.

That would run your percentages way down, the first year that new way of figuring went in, that would run your percentages way down. Your appearance here may not have any meaning—it may have a real meaning and it may not, that is my point.

THE DEFENSE IMPACT PERCENTAGE SHARE OF:



Secretary SCHLESINGER. We can make those calculations on any basis, Senator.

If you take the so-called administrative budget, or what is now called the Federal fund budget, the DOD proportion of that has declined from about 70 percent in the early fifties to about 40 percent today. The unified budget, which is—

The CHAIRMAN. Pardon me. In the early fifties we didn't have what you call a Federal budget, did we?

Secretary SCHLESINGER. The change occurred in the late sixties under President Johnson. But the administrative budget became one that is now known as the Federal fund budget, and the trust funds were added in to make the unified budget. And anyway that you calculate it, of

course, the share of Defense in the total has declined. In relation to total U.S. public spending, we are down to about 17 percent at the present time, which is the lowest that it has been since prior to Pearl Harbor. In terms of the unified budget, adding in the trust funds, we are at about 27 percent, which is a decline from about 60 percent in the early fifties. And if you take the administrative budget, or the Federal funds aspect of it to which your question directly referred, we are down from about 70 percent of the total to about 40 percent of the total. So that the general decline, I think, is reflected, whichever set of assumptions you wish to use.

The CHAIRMAN. All right.

Just on the use of the term "constant dollars," I thought it was clear that when you used that term that that was where you made allowances just for inflation. If you put salaries in there now, you could just as well put in automobiles, tanks, or anything else, it seems to me like, figuring according to what constant dollars are. The increase in salaries, that is just an increase in salaries. And that explains it.

Secretary SCHLESINGER. To the extent that the increase in salary is offset by a genuine increase in productivity, that would distort the results somewhat. But I think that we recognize that the increase of the basic pay of a private from \$21 a month in 1940 or 1941 to \$307 a month is not necessarily reflected in the increase in productivity. Those salary increases also reflected the general rise in the price level.

The CHAIRMAN. If you are going that long route around, you had just as well describe it each time to me and say, as compared to 1942, or whatever your comparison is. But constant dollars just carries the idea of inflation, I thought in all the departments.

Secretary SCHLESINGER. The general approach toward the use of constant dollars is widespread, and it is based upon a set of conventions, some of them arbitrary. But I think that the use of the constant dollar approach to reflect general changes in purchasing power is a useful device to better be able to compare one year with another.

The CHAIRMAN. Yes, it is very handy. But this is just to get an argument over the meaning of the term. Anyway, as it is uniformly used in these statements from the Department of Defense, when you say constant dollars, you are talking about inflation plus increase in salaries, is that right?

Secretary SCHLESINGER. Yes, sir.

The CHAIRMAN. Is there anything else included?

Secretary SCHLESINGER. No, sir.

The CHAIRMAN. Is there anything further additional that you want to say, Mr. Secretary?

Secretary SCHLESINGER. If I may come back to your initial statement, you referred to the fact that this is a record defense budget, the highest one on a percentage basis since 1942, and in terms of outlays, the highest since 1945. I would point out that it has taken 28 years for the Defense budget to reach the level of the Second World War, despite pay increases and generalized inflation, which are the bases of rising prices. At the close of the Second World War in 1945, the total Federal budget was \$96 billion, of which \$82 billion was spent on defense.

Some \$13 billion was spent upon non-defense items. Since the non-defense budget has risen in those 28 years from \$13 billion to \$218 billion, I believe that we can say that there are a number of other budgets that have reached a record level. As a matter of fact, all budgets other than DOD have reached new records each and every year. This morning, for example, if I may choose one, I looked up the increase in the legislative branch budget, and that has increased by a factor of 30 since 1945. So, in an era of inflation and of pay increases, we must expect a gradual increase and new records every year, records that we do not necessarily want.

Thank you, Mr. Chairman.

PREPARED QUESTIONS FROM SENATOR MCINTYRE

Senator MCINTYRE. Mr. Chairman, may I submit for the record a number of questions for Admiral Moorer and the Secretary?

The CHAIRMAN. All right, without objections Senator McIntyre's questions will be placed in the record at this time, and let the answers in his record follow the questions.

[Questions submitted by Senator McIntyre. Answers supplied by the Department of Defense.]

Question. You state (page 9 of Admiral Moorer's statement) that no new USSR AWACS-type development has been noted. Would you care to speculate on the reason for their lack of interest since they should have as much a need for AWACS as we?

[The information is classified and has been furnished separately to the committee.]

Question. You state that the Soviets have generated a momentum in new strategic offensive programs which could easily upset the relative strategic balance. What specifics are available to support this statement?

Answer. I believe this is a moderate assessment of a dramatic Soviet program. Specifics include:

Extensive flight testing of four new ICBMs—SS-X-16, SS-X-17, SS-X-18, and SS-X-19—with MIRV testing on the latter three has been conducted. These new missiles feature increased throw-weight and some employ improved launch and guidance techniques as well as MIRVs. The Soviets are also constructing new small and new large silos, and are modifying current silos; all capable of surviving appreciably higher over-pressures and ground shocks.

The SS-11 MOD 3, a multiple reentry version of the SS-11 is being rapidly deployed.

The USSR has also moved forward rapidly in modernizing its SLBM force. The new 4200 nm SS-N-8 has been deployed aboard the first three Delta-class submarines—now in series production. A new MOD 2 multiple reentry vehicle (MRV) of the SS-N-6 MOD 1, deployed aboard Yankee-class submarines, is nearing operational status. This new MRV SLBM has a slightly longer range than the MOD 1 [deleted] and may be deployed in the last few Yankee-class submarines produced. [Deleted.]

The new Backfire variable-geometry wing, supersonic bomber is being produced [deleted] and will soon be deployed. It is probably best suited for peripheral attack, but it is fully capable of performing intercontinental attack missions and constitutes a potential threat to the Continental US.

Question. If the Soviets ultimately are able to match us in the quality of strategic weapons while exceeding us in quantity, would U.S. security then be threatened? Or doesn't this invincibility of our Triad, although outnumbered, represent an effective deterrent?

Answer. If the Soviet Union is ultimately able to match us in the quality of strategic weapons while exceeding us in quantity, U.S. security could indeed be threatened. In such circumstances the Soviets might achieve strategic capabilities

which we could not match—for example, an ability to threaten the destruction of our ICBM force—giving them such a clear-cut strategic advantage as perhaps to tempt them to exploit their superiority for diplomatic advantage; and this, in turn, might well lead to confrontations and crises in which the U.S. would be at a considerable disadvantage. In this sense, the world's perception of this imbalance in strategic force could be as dangerous to our national security and interests as the disparity in actual capabilities.

The strategic TRIAD provides us a diversification of capabilities, but the existence of such a diversified force cannot in itself deny the threat to our national security that would ensue from a Soviet achievement of strategic superiority. To counter this potential adverse shift in the balance, we would have to strengthen those elements of the strategic forces where our capabilities would otherwise be inferior to those of the Soviet Union. The strategic R&D initiatives proposed in the FY 1975 Defense Budget represent the first tentative steps which we should take now to place ourselves in a position to prevent such a shift in the strategic balance if in future years it appears imminent.

Question. In your opinion, if we were engaged in a lesser form of conflict with the Soviets than a strategic nuclear war, do you believe that if the Soviets were threatened by complete defeat they would not consider a first strike with strategic nuclear weapons to be a viable alternative?

Answer. The central thrust of the policy I am advocating is to make such an escalation in the level of hostilities an extremely unattractive alternative for the Soviet Union. That is why I have consistently stressed the need for deterrence across the entire spectrum of risks. At each step of the escalation ladder, we want to make negotiations a far better alternative than a major escalation in the level of hostilities. For example, we want a powerful NATO conventional defense posture in Europe to deter the Warsaw Pact from launching an attack on Western Europe in the first place. If that deterrent should fail, we want a sufficient theater nuclear capability in Europe to deter the Soviet Union from escalating the conflict to a theater nuclear war. And we also want a powerful strategic nuclear capability to deter the Soviet Union from escalating the conflict to a global nuclear war, particularly before cities become the targets. At none of these levels do we feel that our forces are so large as to be able to threaten complete defeat of the Soviet Union. It is our objective to maintain an equivalence and balance between forces that will always make a first strike with strategic nuclear weapons an unattractive alternative.

So long as we retain this force equivalence, neither side will be able to achieve what I refer to as a "disarming first-strike" capability, i.e., a capability to attack and reduce the opponent's strategic offensive forces to the point where he could no longer penetrate the initiator's defenses in sufficient numbers to cause unacceptable damage to his population and industry. Thus, under these circumstances, a Soviet "first-strike with nuclear weapons" against the United States, including our cities, could hardly be an attractive option. A first-strike attack on our strategic retaliatory forces which deliberately seeks to avoid our cities also would not be a very viable alternative providing we maintain and improve our capability to respond effectively to that sort of attack. Neither type of first-strike attack would yield the Soviet Union a net advantage, and both types of attack would be very costly to them as well as to us.

All our efforts—in negotiations, in targeting doctrine, and in weapons development—are aimed at preserving and hopefully improving mutual deterrence.

Question. Admiral Moorer, why do we have only a limited ability to detect Soviet research and development on general purpose force systems?

Answer. 1. Soviet research and development programs devoted to general purpose weapon systems represents what is perhaps the most difficult detection task we undertake. The low visibility that is an inherent characteristic of R. & D. in support of Soviet Ground Force weapon systems is due, in large measure, to the following practices by the Soviet Union: [Deleted.]

Question. Admiral Moorer, you state that the list of Soviet and U.S. general purpose force systems on Chart 3 is incomplete, yet you make the point that nine of the Soviet systems listed have been deployed compared with only two of ours. Isn't this comparison misleading, since to make a meaningful comparison you

would have to examine and compare the quality of existing forces and include all other on-going programs which are not listed?

Answer. As I have stated, it is not the intent of Chart 3 to provide a comprehensive comparison of overall strengths and capabilities. That is the function of the entire section on general purpose forces in my complete report on relative military posture. Instead it depicts what we consider trends and weight of effort in the chart showing significant new development initiatives in the general purpose forces category. The nine-to-two ratio for systems being deployed reflects, in part, our limited ability to detect R. & D. on new Soviet general purpose systems described in answer to the preceding question. Of course, we know about our own R. & D. initiatives from concept formulation through production and deployment.

Question. Mr. Secretary, on page 21 of your statement, you indicate in relation to the upcoming SALT discussions that you are "proposing a number of research and development programs which would enable us to respond in kind in order to maintain the delicate balance of deterrence, should the Soviets decide to deploy a more efficient hard-target-kill capability that they now deploy." Will you please answer the following questions to the extent possible now, and provide classified details and elaboration later for the record.

How would you define a "delicate balance of deterrence"?

Answer. The balance of deterrence is now delicate because the Soviet Union has achieved strategic parity with the United States. We no longer have that preponderance of strategic nuclear power which up to now has tended to offset Soviet advantages in other military capabilities, notably ground forces. Consequently, we dare not permit the Soviet Union to achieve a significant edge in any area of importance to the strategic balance, for example, in hard-target kill capability. We hope to attain that goal through negotiation. But if we fail in that direction, we must be prepared to counter the growth in Soviet hard-target kill capabilities with appropriate steps of our own.

Question. Will you identify the specific programs to which you refer and the amounts requested for fiscal year 1975. Group them either as replacements for existing systems or hedges against the failure of SALT II and the lapsing of the interim agreement.

Answer. The programs I referred to in my statement are basically research and development efforts in the area of ICBM and, to a lesser extent, in SLBM accuracy and/or yield improvement. To provide us with the future option to match reasonably promptly the hard-target capabilities the Soviet Union is currently developing, the following research and developments are being proposed:

\$77 million in research and development funding is being requested to improve Minuteman accuracy, to develop and RV which retains the physical characteristics of the current RV but with increased yield, and to begin development of a terminally-guided accurate MaRV.

The Advanced ICBM effort would continue in advanced development (\$37 million), and provide a basis for an engineering development decision in FY 1977, to develop a follow-on ICBM incorporating increased yields, greater accuracies and more survivable basing.

The Trident I program includes funds to initiate research and development to improve accuracy and to develop alternative payloads.

All of these research and development efforts would be pursued in pace with developments in Soviet strategic capabilities. Whether any would eventually be deployed is for later decision. That decision of course would be influenced by the outcome of SALT II, and the direction of Soviet advanced developments and deployments.

Question. What criteria were established to determine these specific program requirements?

Answer. The major criterion used to establish specific program requirements was the need for essential equivalence between U.S. and Soviet strategic forces. Major imbalances in the relative capability of strategic offensive forces could significantly undermine deterrence of aggression or invite coercion in crises. One such dimension is the ability to destroy military targets—airfields, submarine bases, and other installations, including "hard" targets such as ICBM's in silos.

Soviet deployment of a significant capability to destroy U.S. ICBM's would be destabilizing, for it could tempt a leader to exercise that option. By demonstrating our resolve to deny such a unilateral capability, we hope to make clear to the Soviet Union the futility of such a move.

Question. What programs, if any, were considered but discarded because they did not meet the criteria?

Answer. Programs were discarded which did not demonstrate both the capability to respond appropriately to threats to our forces and to show our willingness and capability for restraint. Also, for example, procurement funding at this time (i.e., while the current SALT negotiations are underway), would fail to demonstrate our willingness for mutual restraint. We have therefore limited the request to R. & D. funding.

Question. Does the expression "enable us to respond in kind" mean that we have hard evidence that the Soviets are pursuing the exact same developments? If not, why are we supporting these developments, since this goes beyond what we need to "respond in kind?"

Answer. Yes, we have hard evidence the Soviets are pursuing developments which would increase their hard-target kill capability. The Soviets have available today approximately 300 SS-9 missiles whose large warheads give them a credible hard target kill capability. Of the new ICBM's, the SS-X-18 and SS-X-17 have been tested with large single warheads. These warheads together with the estimated accuracy of these new systems would give them also a hard target kill capability. The MIRV warheads on the new large SS-X-18 and the SS-X-19 missiles are also large enough to allow hard targets to be attacked with good expectation of significant damage. Finally, all four new Soviet ICBM systems presently in development have new guidance systems whose characteristics indicate that they are designed to increase accuracy as compared with the older Soviet ICBM's.

Question. What evidence do you have that the Soviets are developing a hard-target-kill capability and when do you believe they could achieve an operational capability?

Answer. The evidence that the Soviets are improving their hard-target-kill capability was cited in the answer to the previous question. The SS-X-18 missile with its single reentry vehicle payload could be operational in 1975. The single reentry vehicle SS-X-17 could be ready for deployment in late 1974, but most likely by mid-1975. The SS-X-17 could probably begin deployment by late 1975. The MIRVed versions of the new ICBMs require more testing than single reentry vehicle versions because the smaller MIRV warheads require greater accuracy which can only be confirmed through more extensive testing, and this could delay their deployment somewhat.

Question. Is there the serious risk of triggering a qualitative strategic offensive race by proposing such a large number of new programs?

Answer. The funds proposed for these new R&D programs are relatively modest, as indicated earlier. We simply are taking the first few prudent steps to hedge against Soviet deployment of improved strategic offensive forces, but without committing ourselves to deploying compensating systems in our own forces. At the same time, we are negotiating in SALT II to reduce the strategic capabilities of both sides. The choice is with the Soviet Union. I believe that U.S. readiness to improve its forces, should Soviet actions make that necessary, will add to the incentives for the Soviets to negotiate mutually satisfactory limits on strategic offensive armaments.

Question. If we pursue a wide range of new strategic developments we have established numerous options which are a clear signal to the Soviets that we can, if necessary, develop and produce advanced strategic weapons to counter any new threat which their large research and development program can evolve. We can do this by limiting our research and development to critical long lead technology and constraining the level and pace of work, consistent with orderly technical progress, to minimize expenditure of funds, but at the same time insure that we are keeping pace with the Soviets. Then, if they begin to make a move we are in a position to match it. Why don't we adopt this approach and avoid

major dollar commitments to new programs which are hard to turn off once they get started, and which, when cancelled have a disastrous effect on industry and on the hundreds or thousands of people who are thrown out of work?

Answer. The basic approach you outline is in fact the thrust of our strategic development programs. Our strategic initiatives are explicitly designed to provide us with a range of viable alternatives from which timely selections for deployment can be made. It permits us to examine—at low cost and with no commitment to deploy—the relative merits of various options. Developing these options is not a commitment to produce and deploy them; it is rather to provide us with a ready posture so that we can respond, if necessary, by producing them.

Question. Do you believe that there are differences in the strategic problems of the U.S. and the Soviets for geopolitical reasons, such as the common border between China and Russia, which could justify the need for any greater strategic offensive capability by the Soviets?

Answer. There are differences in the strategic problems, but at the present time, these do not justify the need for any greater Soviet strategic offensive capability.

Question. Mr. Secretary, we appear to be broadening and expanding trade with the Soviets including the sale of technology such as building a truck factory and entering long term agreements for joint development or computer technology. In your opinion, isn't this in the long term going to backfire on us? Aren't we helping the Russians catch up with our technology which is the primary lead we have over them in the quality of our weapons and in production know-how?

Answer. This is a risk, Senator, but there is also an opportunity to ameliorate over the long run the tensions in our relationships with the Soviet Union. To minimize the risk, we examine on a case-by-case basis each major transaction directly important to national defense.

Question. Mr. Secretary, you state (page 9) that "growth in force structure brought about by increased military efficiency should not be denied us . . ." Shouldn't increased military efficiency, in fact, permit us to reduce our forces since we should with increased efficiency be able to do the same job with less equipment and less men?

Answer. By "increased efficiency" I mean that we have improved the "teeth-to-tail" ratio of our forces, so that we get a larger proportion of combat man-years for a given total strength. We have done this through reductions in headquarters and supporting forces. In keeping with our view that General Purpose Forces are somewhat thin, we propose to apply those savings to increasing our combat capability.

Question. On page 10 you state "there is no substitute among the other industrialized democracies for the power of the United States." While this may have been true in the past, haven't these countries reached a state of economic growth which would permit them to provide an increasing portion of such power from their own resources?

Answer. The countries of NATO Europe do now provide a larger share of the total gross national product (GNP) of NATO and of the total military expenditures of NATO countries than in the past. For example, in 1954, of total NATO GNP the US produced about 59% and NATO Europe 37%; in 1972, the US produced about 55% and NATO Europe 41%. Of total NATO military expenditures, in 1954 the US provided roughly three-fourths and NATO Europe one-fourth; in 1973, the US provided roughly two-thirds and NATO Europe one-third. Similarly the total defense expenditures of NATO Europe have grown more rapidly in real terms than those of the US, between 1954 and 1973. In particular, while US defense expenditures in real terms, and as a percent of GNP, have been declining for the last five years, Allied expenditures have been increasing.

Question. You also state (bottom page 10) that "Deterrence must operate across a broad spectrum of contingencies; we cannot afford gaps in its coverage that might invite probes and tests." Do you seriously believe that we can avoid probes and tests even with an effective and broadly based deterrence?

Answer. As the question implies, the ultimate decision to initiate "probes and tests" rests with the Soviets. While we cannot guarantee that such actions will not occur, we can—by maintaining broadly based deterrence—impress upon any nation that might contemplate such a course, that no benefits are likely to accrue and that the risks are unacceptably high. Certainly, perceived weakness in either the resolve or the strength to resist will encourage such probes and tests.

Question. Despite the ABM Treaty of 1972, you are asking for substantial increases in advanced ballistic missile defense. Specifically, Site Defense increases from \$110.1 million to \$160.0 million, and Advanced Ballistic Missile Defense from \$61.8 million to \$91.4 million. Why not restructure these programs and limit them to critical, long lead technology at nominal cost?

Answer. The ABM Treaty does not preclude R&D for ballistic missile defense and we see the Soviets moving forward rapidly in this area. Therefore, it is important that we maintain a vigorous ballistic missile defense R&D program to prevent the Soviets from gaining a technological lead over us that could threaten the strategic balance. Such an R&D program needs to maintain a system development capability in addition to the exploration of long lead critical technologies because one of the principal problems in missile defense systems is the overall system interaction and integration. The maintenance of a system capability will [deleted] provide a base if missile defenses are needed in the future. The Site Defense program provides this system development effort, and the \$160 million funding requested for FY 1975 is necessary to pursue the orderly and timely development of this option for Minuteman defense. The Site Defense system demonstration at Kwajalein in FY 1977 and FY 1978 will provide the Soviets with a highly visible indication of our ballistic missile defense system capability.

The Advanced Ballistic Missile Defense program is specifically structured to resolve critical, long lead technology issues at the minimum necessary cost. The program covers a broad scope of rapidly advancing technologies applicable to ballistic missile defense such as optical sensors, computer software and high performance interceptors. The program also involves critical field experiments that improve our understanding of the complicated physical phenomena such as missile reentry effects encountered in defense scenarios. We look to this program to maintain pace with the Soviet Advanced R&D and help prevent technological surprises by them. Last year, our \$100 million request was reduced to \$61.8 million, reducing significantly our ability to consider critical technology issues. We have reacted to express Congressional concerns in this area and this year are requesting \$91.4 million, which is a return to a funding level typical of prior years, and which will permit us to carry on the vigorous program necessary to maintain a lead in strategic defense technology.

Question. Are you familiar with the findings and recommendations of the Bisplinghoff Committee report on the B-1 development, and could you comment on them?

Answer. Yes, I am familiar with the Bisplinghoff Committee report.

The principal finding of this group of technical and management experts was that there are no major technical problems which preclude the successful development and production of the B-1 aircraft. The Committee noted, however, that the existing program plan would make completion of the development effort and successful transition to the production phase unlikely within projected cost and time schedules. The Committee also expressed the belief that three aircraft would not be sufficient to complete development of a complex program such as the B-1 and allow the final development aircraft to reflect accurately the initial production aircraft.

With regard to schedule and cost, the Committee's best judgment was that a two to three month delay would be incurred in the projected first flight of Air Vehicle #1 and a six to twelve month delay in completion of the total development program. The Committee also estimated that at least \$300 million more would be required to complete the development program as it was rephased in July 1973.

The committee's major recommendation was that the B-1 program should be restructured to provide for completion of the development effort on a more realistic basis and to provide for a less disruptive transition into the production phase.

Finally, Dr. Bisplinghoff and his associates also furnished Secretary McLucas with their estimates of potential B-1 performance parameters--ranging from Possible, to Most Probable, to Reasonably Adverse. These potential performance deviations result primarily from an increase in the gross take-off weight of the B-1 aircraft, from about 360,000 lbs. to the presently projected 395,000 lbs. The Air Force has conducted a thorough analysis of the utility of the B-1 aircraft within the full range of potential performance deviations provided by the Committee. The Secretary of the Air Force, the Chief of Staff, and the Commander in Chief of the Strategic Air Command have concluded that even under the most adverse estimates of performance the B-1 would be operationally effective against the full target spectrum. Moreover, even with the increased weight there are still 100 airfields in the U.S. which would support continuous B-1 operations and an additional 220 airfields which would be suitable for use in emergency dispersal operations. Thus, although some weight reduction should result as a byproduct of engineering changes for purposes of producibility and cost avoidance, there is no requirement for significant changes to the B-1 program solely to regain performance.

A basic problem highlighted by the Committee was the severe program discontinuity which results from the gap of 24 months between first flight and the production decision. The contractor would not be able to retain critical skills and know-how during such an extended gap in effort. Moreover, any plan which was dependent on the recovery of these critically needed personnel after a production decision is made would expose the program to additional technical risks and costs.

Accordingly, in order to facilitate the B-1 flight test program and to provide a more realistic basis for transition to production, we propose to begin work on Air Vehicle # 4 in FY 1975 and, possibly, Air Vehicle # 5 in FY 1976. These aircraft would provide needed flight test data 12 to 18 months earlier than would otherwise be possible, and they could also be used to introduce engineering refinements to the basic design.

Although the fourth and possibly the fifth aircraft would be funded with RDT&E funds, they would ultimately be assigned to the SAC inventory. Moreover, the additional aircraft would be built on existing development tooling, modified only as required by aircraft design improvements. Thus, there would be no additional program cost, assuming a subsequent production decision. Nor would these additional aircraft prejudice the production decision. In consonance with the fly-before-buy policy, the B-1 is expected to undergo about two years of flight testing and achieved the essential critical milestones before a production decision is made. Under the currently proposed program plan, this decision could be made in November 1976.

Question. We have learned some important lessons from the Mideast conflict. How has this been applied to our development programs? Have we terminated, initiated, or change direction of any developments?

Answer. Dr. Currie, the Director of Defense Research and Engineering, will discuss this subject in detail with the committee. (See his statement of 26 February 1974 before the committee.)

Question. Conventionally powered attack submarines are about one-third the cost of nuclear powered submarines. Has this been studied by your system analysis office to determine if a mixed submarine attack fleet has merit?

Answer. The primary mission of our attack submarine force is to help defend against the hostile submarine threat to our shipping and surface naval forces. Submarines accomplish this mission by using their sonar equipment to detect the enemy at long ranges and then moving covertly to intercept and attack. While both nuclear and conventional submarines can be equipped with effective ASW sensors, the unlimited submerged tactical mobility of nuclear submarines contrasts sharply with the very limited intercept capability of submarines which must rely on batteries to remain relatively quiet and therefore undetected. It is primarily for this reason that the U.S. has been building only nuclear-powered submarines for ASW. We are continuing to examine the feasibility and desirability of building a new class of nuclear attack submarines (SSNs) that would be smaller and less costly than those currently under construction.

Question. The Air Force budget includes \$36 million to begin engineering development of an Air Combat Fighter, based on the Lightweight Fighter Prototype. Since flight test of the prototype will be conducted during fiscal year 1975, why not wait until the tests are completed and evaluated and then start engineering development in fiscal year 1976?

Answer. The General Dynamics prototype, the YF-16, is in flight test now and the Northrop prototype, the YF-17, should begin flight testing this April or May. Without accelerating the test program, which is feasible, each prototype should have completed sufficient flight testing in fiscal years 1974 and 1975 that an intelligent decision can be made to move one of the two candidates into full scale development in the third or fourth quarter of 1975. Some of the Air Combat Fighter funds will be expended during the early part of fiscal 1975 for design trade-off analysis as part of the "missionization" of each design. The remaining funds will be used for the selection process and the beginning of the engineering development phase. The alternative—that is, to wait until FY 1976—would create a nine month gap during which period the contractors would have no support to maintain their engineering efforts for the program. The chosen path is in the best interest of the U.S. government both from the standpoint of time and dollars.

PREPARED QUESTIONS FROM SENATOR HUGHES

[Questions submitted by Senator Hughes. Answers supplied by Department of Defense.]

Question. Mr. Secretary, in your confirmation hearing, I asked the following question: Do you share the view, previously expressed by Secretary Laird and Secretary Richardson, that the United States should not develop weapons with increased yield and accuracy so as to give a "hard target kill" capability? Could not the development of such weapons be construed as having a first strike potential? You answered: "I share the views of previous Secretaries of Defense that we do not have and are not seeking a disarming or first strike capability." Despite that answer, how much is in the new budget for improving the yield and accuracy of warheads? If we proceed along these lines, how can the Russians be sure that we are not developing a capability to disarm their land-based missiles in a first strike?

Answer. As noted in an answer to an earlier question, approximately \$77 million is included in the FY 1975 Defense Budget for R&D to improve the accuracy and yield of Minuteman III RVs. In addition, some portion of the \$87 million requested for Advance ICBM Technology will be devoted to work on accuracy. Also, funds have been included in the Trident I program for an advanced development effort which could lead to improvements in the accuracy of that missile.

None of these potential improvements in the accuracy and yield of our strategic missiles, however, could conceivably give us a disarming first-strike capability. A "disarming first-strike capability" implies a capacity to attack and reduce an opponent's strategic offensive forces to the point where he could no longer penetrate the initiator's defenses in sufficient numbers to cause unacceptable damage to population and industry. As I have repeatedly stated, we neither desire, nor can we attain, based on straightforward calculations that the Soviets themselves can make, a disarming first-strike capability against the Soviet Union. Nor, if we are reasonably prudent, can the Soviet Union achieve such a capability against us.

The new R&D efforts we are proposing do not and cannot result in a disarming first-strike capability. They are in response to what the Soviet Union is already doing in its strategic missile programs. If the Soviet Union replaces its current SS-9 and SS-11 ICBMs with the new MIRVed ICBMs that are now being flight tested, which is legally permitted under the SALT Interim Agreement, the Soviet Union could then possess the potential for a major counterforce capability to threaten the bulk of our land-based missiles in a first strike. We do not intend to permit the Soviet Union to achieve a unilateral advantage in this vital area of strategic nuclear power. We hope to foreclose such a possibility in the course

of the SALT negotiations by dissuading the Soviet Union from fully exploiting its marked advantage in missile throw-weight. Failing that, we want to place ourselves in position to effectively strengthen our deterrent. Our purpose in proposing these new developments, therefore, is to ensure that the Soviet Union does not acquire—contrary to the spirit of SALT I—an asymmetry of strategic capability, and to ensure also that the Soviet Union is under no misapprehension on this point. In any case, our new development efforts will be placed in considerable measure by the direction of Soviet strategic force programs.

Question. Since the South Vietnamese already have one of the largest armed forces in the world, including more planes than they can even use at present, why have you requested nearly double the amount of military assistance for next year?

Answer. The principal cause for the increase in this year's budget request is the continuing high level of combat in the Republic of Vietnam. Last year's budget, as revised in June 1973, was based on the assumption that only sporadic cease-fire violations would occur. We were able to further pare the FY 1974 budget requirements by relying on resources previously appropriated but not yet delivered to South Vietnam. Rather than the low level of combat which was assumed, the South Vietnamese have experienced numerous upsurges in combat activity, including regimental sized attacks supported by armor and artillery. The threat posed by North Vietnamese and Viet Cong forces in the Republic of Vietnam has grown rather than diminished. Our budget request for FY 1975 is based on the assumption that the level of combat activity since the cease-fire will continue, and it represents our projections of the military assistance which the South Vietnamese Armed Forces will require in this environment.

Question. Will you take steps to declassify the documents on Cambodia bombing recently delivered to the committee?

Answer. I consider the classification assigned that information still appropriate.

Question. There is a lot of concern in the Congress over the large number of troops stationed overseas—because of the costs, the political entanglements, and then the fact that many of these facilities could not even be used for the emergency resupply effort to Israel last fall. How many troops will you bring home next year and how many overseas bases will be closed?

Answer. As you know, our deployments overseas are under constant review by the Department of Defense to adjust and maintain them in accordance with our treaty commitments and our foreign policy objectives. As you also know, the negotiations on Mutual and Balanced Force Reductions in Vienna seek mutual reductions in forces on the part of both NATO and the Warsaw Pact. These negotiations are now proceeding in a serious manner and we have hopes that they will be successful. Unilateral withdrawal of United States troops while the negotiations are in progress, however, would seriously injure their chances of success by removing the Warsaw Pact's incentive to negotiate and encouraging them to wait for us to make further unilateral withdrawals. The course of the MBFR negotiations, therefore, will be one of the considerations influencing our overseas troop strength in the coming year.

As I announced last November, some realignments and reductions in our overseas bases are now being made for efficiency reasons. These adjustments do not impact on our military capabilities. That announcement concerned 59 actions in 12 countries spread over a period of time and will ultimately result in a reduction of about 3900 personnel, both U.S. and local.

We continue to look at U.S. installations and headquarters from the point of view of making our operations more efficient, and we are continuing to explore further reductions, but it is not possible to predict the results of this review at the present time.

Question. How serious is your effort to develop a new air-launched cruise missile? Couldn't this be a lower-cost alternative to an penetrating B-1?

Answer. We are conducting advanced development programs to demonstrate the performance characteristics of such a missile prior to engineering development. The various trade-offs between range, accuracy, penetrability, and cost are to be validated.

Both the Air Force and the Navy are cooperating in these programs. Since the B-1 provides improved pre-launch survivability over any other aircraft launch platform, electronic countermeasures to enhance penetrability and a manned crew for decision making, it could not be replaced in the overall sense by an air-launched cruise missile. For the 1980's and beyond, we need to insure that we have a survivable launch platform such as the B-1. The air launched cruise missile could be an adjunct to this survivable bomber force.

Question. What are you going to build on Diego Garcia? If that's all we have in the Indian Ocean, won't it be extremely vulnerable? And what assurances would we have that any such facility could be used in all Near Eastern and South Asian contingencies?

Answer. The expansion of facilities on Diego Garcia will include an enlarged anchorage, a longer runway, an aircraft parking apron, pier construction, a warehouse, enlarged POL storage capacity, power plant expansion, a modest maintenance capability and increased quarters and other structures related to the support of U.S. personnel.

Diego Garcia would not be any more vulnerable than any other U.S. military base abroad. In fact, since it is located on an otherwise unpopulated island, it should be far less vulnerable to political disturbances than most other U.S. bases abroad. Its availability for contingencies is, of course, a matter for agreement between the U.K. and U.S. Governments.

Question. How significant is the retargeting you told the press about? What percentage of assigned targets for bombers, ICBMs and SLBMs were urban-industrial versus military before this change and what are the percentages now?

Answer. With regard to alterations in our targeting doctrine, we believe it makes sense and is not so novel as the media would make it seem. This targeting concept has been discussed at least from the days of Secretary McNamara's Athens address. The need for strategic flexibility and selectivity has been discussed in the Defense Reports of Secretary McNamara, Secretary Clifford, and Secretary Laird. We are simply placing greater emphasis than heretofore on options other than massive strikes in order to be able to deter conflict across the entire spectrum of risk. The current options are not being abandoned, rather they are being supplemented with other, smaller options to provide greater flexibility in targeting. The assigned targets under the current options remain unchanged.

Question. How much have we spent in each of the last five years on (1) ASW R&D and (2) ASW procurement? How does this compare with the Soviet effort in both cost and quality?

Answer. U.S. R. & D. efforts for ASW items (including some multi-mission items) for the last five years have amounted to approximately \$2.2 billion. Distribution by year was:

Fiscal year:	(In millions of dollars)
1970	42.8
1971	551.5
1972	548.6
1973	367.5
1974	324.2

A meaningful costing of U.S. ASW procurement efforts is not possible because the aircraft and ship platforms for ASW equipment and weapons are multi-purpose platforms,—e.g., DD 963 destroyers—have other missiles in addition to their ASW mission. Any allocation of the platforms' costs to the ASW mission would be arbitrary and dependent upon scenario assumptions that are constantly changing. While costs could be accumulated for specific types of ASW equipment and weapons, even this would require some arbitrary allocation of cost for items like the MK 48 torpedo, which is both an anti-submarine and an anti-ship weapon. Soviet ASW system procurement is similar to that of the U.S. Navy in that ASW platforms have several missions.

Equivalent cost estimates for Soviet ASW R. & D. programs cannot be produced due to Soviet security precautions. The full extent of Soviet ASW development activities is unknown, although we do have some evidence of testing and production of certain weapons and sensors. A qualitative comparison of United States and Soviet ASW systems which have become operational within the last

five years may be useful. Both countries appear to be carrying out general improvement of their ASW aircraft, surface combatant, submarine, mine warfare, and surveillance forces. For example, during the last five years both countries have introduced—

New long-range ASW patrol aircraft (the May and Bear F in the U.S.S.R.; the P-3C and S-3A in the U.S.A.);

New multipurpose surface combatants capable of ASW operations (for example, the *Kara*, *Kresta-II*, *Krivak*, and *Grisha* Classes in the U.S.S.R.; the *California* (DLGN-36) and *Knox* (DE-1052) Classes in the U.S.A.);

New submarine types with ASW as a mission (the *Victor* class SSN in the U.S.S.R.; the *Sturgeon* class SSN in the U.S.A.);

New types of ASW ordnance, [deleted] ASW aircraft torpedo in the U.S.S.R.; the Mark 48 21" submarine torpedo in the U.S.A.); and

New types of surveillance/search systems (for example, the [deleted] system in the U.S.S.R.; various types of passive towed array sonar systems in the U.S.A.).

Additionally, the Soviets are known to have been testing several new kinds of mines which appear to have ASW as a principal role. We estimate that several of these are in production and operationally available. The U.S. Navy has a new ASW mine system designated Captor in development which is expected to become operational [deleted].

In general, U.S. ASW systems discussed above are significantly superior to Soviet ASW systems, particularly when evaluated against opposing submarine targets. Recently delivered U.S. systems continue to show greater effectiveness than equivalent Soviet systems. In part, this difference reflects differing overall priorities in the two navies. The Soviets place greater emphasis on strategic deterrent and antiship operations than on ASW, while the U.S. Navy places as much or greater emphasis on ASW as on any other Naval mission. These differing ASW capabilities also reflect the generally higher level of U.S. technology.

Question. A stable deterrent may well require mutual agreement to limit ASW development so that each nation has an invulnerable second strike capability. What are the quantitative and qualitative factors in ASW capability which could be mutually verifiable?

Answer. We do not agree that stability of the deterrent and the continued invulnerability of the second strike capabilities of each nation require a mutual agreement to limit ASW development. There is no known ASW capability or technology which for the foreseeable future would eliminate the second strike capability of either the U.S.S.R. or the U.S.

Moreover, the question of a mutual limitation on the development or deployment of ASW forces must be approached with caution. Our ASW forces are primarily designed to protect our long and critically important sea lines of communications against the numerically superior Soviet general purpose submarine forces. A general agreement to "limit ASW development" could place the United States and its allies at a considerable disadvantage by limiting our general purpose ASW capabilities, for there is no practical way that we know of to distinguish strategic (ballistic missile submarine) and tactical (general purpose submarine) ASW activities.

Question. What are the programs and associated costs for improving warhead yield and accuracy? For which missile systems are these intended?

Answer. To provide us with the future option to match reasonably promptly the hard-target capabilities the Soviet Union is currently developing, the following research and developments are being proposed:

\$77 million in research and development funding is being requested to improve Minuteman accuracy, to develop an RV which retains the physical characteristics of the current RV but with increased yield, and to begin development of a terminally-guided accurate MaRV.

The Advanced ICBM effort would continue in advanced development (\$37 million), and provide a basis for an engineering development decision in FY 1977, to develop a follow-on ICBM incorporating increased yields, greater accuracies and more survivable basing.

The Trident I program includes funds to initiate research and development to improve accuracy and to develop alternative payloads.

All of these research and development efforts would be pursued in pace with developments in Soviet strategic capabilities. Whether any would eventually be deployed is for later decision. That decision of course would be influenced by the outcome of SALT II, and the direction of Soviet advanced developments and deployments.

Question. When is the Soviet Union expected to have the capability we now have to detect submarines as quiet as Poseidon? As Trident?

Answer. [The information is classified and has been furnished to the Committee.]

Question. Which programs now in the budget could not be deployed under the existing SALT agreements?

Answer. All the systems now in the budget could be deployed within the current SALT agreements, although these deployments naturally would have to conform to terms of the agreements. For example, the ABM Treaty would prohibit any future deployment of the Site Defense System at Grand Forks in excess of 18 radars and 100 interceptors.

Insofar as strategic offensive systems are concerned, our currently planned deployments are fully consistent with the Interim Agreement and, as indicated earlier, the R&D programs we have underway are prudent steps to hedge against possible Soviet deployments of improved strategic offensive forces. We have not, however, committed ourselves to deploy compensating systems and continue to seek, in SALT II, to stabilize at current levels and ultimately to reduce the strategic capabilities of both sides.

Question. Which programs in the budget are intended primarily as hedges against the failure of a permanent SALT agreement and which are for programs which we would want to have in any event and which we would expect the USSR also to want to have?

Answer. U.S. R. & D. programs in the FY 1975 budget are directed at the whole range of uncertainties about the future of Soviet strategic programs. As noted in response to earlier questions, the Soviet Union, within the bounds of the current Interim Agreement, could pose a threat to our land-based missile forces if it fully exploits its substantial advantages in missile throw-weight and numbers. Our general objective is to ensure essential equivalence between United States and Soviet strategic forces, preferably by achieving a permanent SALT agreement, but if necessary even without that agreement, and our R. & D. programs are proposed with this in mind. In SALT we are seeking to constrain, and even reduce, offensive capabilities of both sides. In the event we should not achieve in SALT all we would hope, we feel we can do no less than develop in R. & D. the options to deny an asymmetrical, destabilizing advantage to the Soviet Union.

Question. On the basis of recent tests, what are the reliability factors for our Minuteman, Polaris, Poseidon, and Titan missiles?

Answer. The currently approved Joint Chiefs of Staff reliability factors for these systems are: [Deleted.]

Question. What are the increased costs and benefits of testing Minuteman from existing silos rather than Vandenberg?

Answer. The cost of the eight launch OBL program is \$26.9 million. The approximate cost of an eight missile test launch from Vandenberg is \$24.3 million. This cost includes test range support cost, missile transportation, and refurbishment of launch silos.

The primary testing benefit of the OBL program is assurance of existing operational data which has been derived piecemeal from Vandenberg launches, laboratory tests, ground electronic tests in the operational units (Modified Operational Missile and Simulated Electronic Missile tests), and such. The full range operational launch ties all of this together in one end-to-end exercise and correlates the data upon which our effectiveness calculations are based. The U.S. has never fired an ICBM from an operational silo. Vandenberg tests differ from OBL. For an OBL the missile will not be removed from the silo; the operational RV is simply replaced with a test RV. Electrical/mechanical connections in the operational silo are not disturbed. Ground electronics for an entire operational squad-

ron are tested in OBL. The VAFB missile is 10" longer and 300 lbs. heavier than an operational one. OBL flights overland will verify gravity models developed from VAFB flight data. VAFB silos have additional hardware protection systems because they are re-used. Two OBLs will be from non-protected (pure operational) silos which will provide data on the possible refire capability for Minute-man.

Question. Will you please provide an unclassified table of strategic force strengths for 1973 and 1974, including (at least) ICBM launchers, SLBM launchers, Strategic Bombers, and Total Offensive weapons (force loadings) for the U.S. and USSR?

U.S. AND U.S.S.R. STRATEGIC FORCE LEVELS

	Mid-1973		Mid-1974	
	United States	U.S.S.R.	United States	U.S.S.R.
Offensive:				
ICBM launchers ¹	1,054	1,550	1,054	1,575
SLBM launchers ²	656	550	656	660
Intercontinental bombers ³	496	140	496	140
Force loadings weapons.....	6,784	2,200	7,940	2,600
Defensive: ⁴				
Air defense interceptors ⁵	559	2,800	532	2,600
SAM launchers.....	481	9,800	261	9,800
ABM defense launchers.....		64		64

¹ Excludes launchers at test sites.

² Excludes launchers on diesel-powered submarines.

³ Excludes bombers configured as tankers and reconnaissance aircraft.

⁴ Excludes launchers at test sites.

⁵ These numbers represent total active inventory (TAI).

Question. What progress have our NATO allies made in providing the offset agreements required under the Jackson-Nunn amendment?

Answer. We have asked the Allies to offset total US defense expenditures in NATO Europe which are estimated at \$2.1B as defined under the Jackson-Nunn Amendment.

We are negotiating a new bilateral offset agreement with the Federal Republic of Germany, and hope to conclude those negotiations soon. We are confident that the agreement will include a renewed commitment by the Germans for additional procurement, troop facilities rehabilitation, and an additional amount to pay for certain US budgetary costs incurred in the Federal Republic.

We have also asked the other NATO Allies to offset those US defense expenditures not covered in the US-FRG bilateral agreement. The Allies have declared their intention to participate in arrangements which provide a common solution to the US problem. The Allies have not agreed to any given solution at this time. However, a NATO Study Group has reviewed US expenditure data and, in December 1973, presented the NATO Ministers with several options which could serve as a basis for offsetting US expenditures.

The NATO Ministers have also instructed the appropriate NATO Committees to study the possibility of reducing the percentage share of the US contribution to various NATO common budgets. Perhaps of equal importance is the fact that the NATO International Staff has taken on the task of devising a system to credit Allied purchases of military related items in the United States.

Question. What is the current strategic significance of Guantanamo naval base? What alternatives are there to this facility?

Answer. [Deleted] the US Naval Base, Guantanamo Bay, Cuba, is an important unit in the US Caribbean base complex, consisting of Panama, Roosevelt Roads, and Guantanamo Bay. The complex was developed to: (1) protect the ocean approaches to the US and shipping between the Caribbean and Eastern Atlantic/South American ports, (2) defend the Panama Canal, (3) carry out ASW operations, and (4) support combatant naval forces in the defense of the Caribbean sea area. Guantanamo provides an important large, deep-water, all-weather base for Caribbean naval operations and training, and for support of

units of the Atlantic Fleet. Retention of these facilities provides assurance of a continuing US military and political position of strength in this area. There are no alternative facilities with all these advantages.

Question. What part of the budget can be attributed to the all-volunteer force? If the draft were to be reinstituted next year, what would be the likely first year savings?

Answer. It is not possible to give a precise accounting of the share of the DOD budget that can be directly attributed to the conversion to the All Volunteer Force (AVF). The total dollar amount depends upon what programs one chooses to include as costs directly attributable to the AVF.

The most realistic estimate of the increase in the DOD budget which can be directly attributed to the AVF is \$734 million in FY 1974 and \$743 million in FY 1975. This is less than one percent of DOD's total budget authority for those years. Over one-third of these totals include expansions to the Active and Reserve forces recruiting and advertising programs. Another one-third comprise legislated compensation programs such as the combat arms enlistment bonus, the full annual cost of pending legislation for enlistment/reenlistment bonuses (\$77.8 million), and various scholarship costs for ROTC and Health Professions. The remaining third accounts for a wide variety of programs in the areas of education and travel entitlements for certain junior enlisted personnel and improving living conditions and services on posts and bases.

These totals exclude comparability pay raises which have been granted military personnel since the principal of military pay comparability with the civilian sector was established with the enactment of Public Law 90-207 in 1967, several years before the first efforts began to convert to an AVF.

These totals do not reflect savings which have been realized through longer initial terms of service and an overall reduction in turnover throughout the force. For example, during the high draft years (1967 to 1969), each military accession contributed an average of 3.3 productive man-years, including an allowance for reenlistment experience. Today, each accession contributes an average of 4.1 productive man-years. After 1975, this figure will increase to 4.5 productive man-years. The annual budget savings that will occur as a result of these changes amount to \$400 million to \$500 million in 1975 and \$500 to \$600 million in 1976 and beyond. Thus, the incremental cost of the AVF is probably \$300 million or less.

Question. How would you define "a major counterforce capability?" What is the present U.S. counterforce capability? How has that capability changed over the past five years? How does it compare with present Soviet counterforce capability?

Answer. A strategic "counterforce capability" is the capability to attack effectively opposing military targets. These military targets include, but are not limited to, an opponent's strategic nuclear forces. We have had a limited counterforce capability for many years. With the growth in Soviet strategic missile forces from the 1960's onward, the Soviet Union can now be said also to have a limited counterforce capability.

While the United States has had the capability for some time to target military as well as industrial targets—and indeed our targeting plans have always included both kinds of targets—our targeting doctrine has involved relatively massive responses. Because of the growth in Soviet strategic missile capabilities, and their capacity now to pose a greater range of threats, we are adjusting our targeting doctrine to ensure that the President has a wider range of selective options and is not restricted principally to massive options. We are putting potential opponents on notice that we are actively pursuing selectivity and flexibility in our targeting, and we believe that this will add to deterrence across the wider spectrum of risk.

A "major counterforce capability" implies a capability to inflict major damage on some principal element of the opponent's military forces—such as his ICBMs, his SLBMs, or his bombers. The new family of Soviet ICBMs—especially the MIRVed version of the SS-X-18—if deployed in the numbers permitted under the Interim Agreement—would represent a significant step toward a "major counterforce capability" against our ICBM forces.

The present U.S. strategic counterforce capability is quite limited. While the U.S. counterforce capability, including the hard-target capability, has improved

over the last five years as the MIRVed Poseidon and Minuteman III missiles have been deployed and the accuracy of the latter has been improved, we lack a major counterforce capability against the Soviet strategic offensive forces, except perhaps against their bombers which constitute the least important element of those forces.

If the Soviet Union replaces its current SS-9 and SS-11 ICBMs with its new MIRVed SS-X-18, SS-X-19 and SS-X-17 ICBMs while we make no further improvements in our counterforce capabilities, the Soviet capability against our ICBMs will greatly exceed our capability against theirs by the end of this decade or the early 1980s. Further Soviet development of more advanced missiles would eventually allow them a high confidence counterforce capability against our ICBMs.

We prefer and hope to stabilize mutual capabilities in the SALT negotiations. But we would be foolish to allow the Soviets to think they might be permitted to upset the strategic balance on which deterrence and stability depend, and it is against the uncertainties in the future direction of Soviet strategic forces that we have included strategic R&D programs in our FY 1975 budget.

Question. The President's budget message says that Soviet military spending is increasing. Can you provide detailed, preferably unclassified data on Soviet military spending? How reliable are these estimates? What are the major problems in making such estimates and comparing them with US spending? In particular, how much has the USSR spent on defense in each of the last 10 years, compared with US spending?

Answer. Classified comparable estimates of the level of Soviet military spending as compared to US defense spending over a ten year period have been prepared. [Deleted.] Since these estimates are for comparison with US defense spending, the level of Soviet defense activity is estimated in dollars and represents, other than manpower cost in support role, what it would cost to reproduce the Soviet force in the US. A constant (1972) price base has been used. Thus, variations in spending levels shown in the data should reflect changes in the forces and programs themselves and not inflation. [Deleted.]

Question. How does total Warsaw Pact spending on defense compare with that of NATO over the past five years?

Answer. The estimated dollar costs for the Warsaw Pact and NATO Allies shown below provide an indication of the general size of the respective defense programs by showing what they would cost if purchased and operated by the U.S. A constant (1972) price base has been used, therefore the data reflects changes in the forces and programs themselves and not inflation.

ESTIMATED DOLLAR COSTS OF NATO AND WARSAW PACT DEFENSE EXPENDITURES

(In billions of dollars)

	1968	1969	1970	1971	1972
NATO:					
United States ¹	102.20	98.70	91.20	82.80	77.50
NATO Europe (including France).....	43.69	44.17	43.65	44.53	44.66
Total.....	145.89	142.87	134.85	127.33	122.16
Canada.....	2.13	2.02	1.82	1.89	1.82
Total, NATO.....	148.02	144.89	136.67	129.22	123.98
Warsaw Pact:					
U.S.S.R. ¹	[Deleted]				
NSWP ²					
Total, Warsaw Pact.....					

¹ Includes military retirement pay.

² Preliminary.

Question. What are the comparable amounts and percentages of total defense budgets spent at present by USSR and US on: strategic programs, military manpower, naval programs, military R&D?

Answer. The information is classified and has been furnished separately to the committee.

Question. Please provide estimates of the costs of U.S. forces committed to NATO defense for fiscal years 1973, 1974, 1975. How are these costs calculated? What factors are included?

Answer. (The information will be provided by separate correspondence.)

Question. How valid is the contention that missile throw-weight is the fundamental long term determinant of strategic strength? It is assumed that the U.S. has reached a technological plateau in making other qualitative improvements in our strategic forces? Are there important qualitative improvements that can be made other than MIRV and increased accuracy?

Answer. Missile throw-weight is a basic parameter for assessing the strength of strategic missile forces since technological improvements coupled with a throw-weight advantage can result in a perceived strength imbalance. In the long term, with technological equivalence, throw-weight would be a fundamental determinant of capability. We have not reached a technological plateau. Our lead in technology allows us many options for qualitative improvements. Other than MIRV and accuracy, which provide a number of options for maintaining strategic equivalence, we could vary the yield of existing warheads and improve the effectiveness of our missiles. Ultimately, without an equitable agreement for strategic arms limitations, we could use our technological base to increase dramatically the throw-weight of our missiles. We do not desire a technology or throw-weight race, but we are prepared to take those actions necessary to maintain overall equivalence until an equitable agreement is reached.

Question. What are the estimates of how many people would be killed in the U.S. and U.S.S.R. as a result of a major attack by the other nation limited to military targets?

Answer. Fatality estimates are subject to considerable uncertainty due to the sensitivity to assumptions about magnitude of attack, targets attacked, warning, weather conditions, and other technical factors associated with the nuclear weapons employed. A major "military only" attack could mean an attack on ICBM silos only; ICBM silos, bomber bases, and submarine ports; or all military targets.

An attack on our ICBM silos only would probably result in approximately [deleted]. If bomber bases and submarine ports were also attacked, the number of fatalities would increase substantially because, unlike ICBM silos, many of these facilities are located near population centers. [Deleted.]

Question. How does Soviet airlift capacity compare with that of the United States?

Answer. The U.S. airlift force consists of strategic airlift (70 C-5s and 234 C-141s) which are used for intertheater movement and tactical airlift aircraft (primarily 489 C-130s) which are used for intratheater movement. The Soviet airlift force consists of about 30 operational AN-22 aircraft with a capability somewhere between that of our C-141 and C-5 and about 700 operational AN-12 aircraft with a capability slightly less than that of our C-130s. The Soviet AN-22s are used strictly for strategic airlift whereas the AN-12s are used for both strategic and tactical airlift. It is not clear how many of the Soviet AN-12s could be used to satisfy strategic airlift requirement. Thus any comparison of Soviet and United States airlift forces must consider that the total airlift force. The following table shows the number of aircraft and the current wartime surge capability of the United States and Soviet airlift forces to move palletized cargo over a 1500 nm distance.

	United States	Soviet
Number of aircraft ¹	793	730
Capability (kilotons/day).....	16.3	4.7

¹ Includes United States' C-141's, C-5's and C-130's and Soviet AN-22's and AN-12's.

The above capability can be augmented upon mobilization by U.S. Civil Reserve Air Fleet (CRAF) aircraft and Soviet Aeroflot aircraft.

Although the United States has substantially more airlift capability than the Soviets under similar movement conditions, the U.S. edge is offset by the location of the two nations relative to areas of national interest. For example, in a NATO contingency, the distance from the Central Region to Soviet bases would be about 1500 nm whereas the U.S. would have to transmit a distance of about 3500 nm. Furthermore, the Soviets could make maximum use of their rail and road network leading to the area.

Finally, when considering the capability to move extremely heavy and large items such as battle tanks, the U.S. could employ its 70 C-5s, while the Soviets would be able to use its 30 AN-22s for such lifts.

Question. How does Soviet sealift capability compare with that of the United States?

Answer. Overall, the Soviet merchant fleet of 1500 vessels of approximately 1000 gross registered tons is the world's fifth largest merchant marine fleet in number of ships and ninth in total tonnage. The U.S. fleet of 971 ships ranks ninth in total number, but the tonnage capability of these ships is the seventh largest in the world since U.S. ships are normally larger than the Soviet's. The USSR has some 370 cargo ships and 112 tankers which are believed to be equipped and suitable for long range military sealift. All are less than 20 years old, are capable of speed in excess of 14 knots, and have the needed heavy lift booms and hatch size. The United States operates 239 comparable ships and 162 tankers which meet similar military supply requirements.

Soviet amphibious lift is capable of transporting between 9000 and 11,000 troops and is expected to increase [deleted]. Presently, the U.S. amphibious lift force has sufficient capacity to lift just over one Marine Corps Division/Wing (MAF) which includes about 39,000 troops. By 1978, the overall capacity of U.S. amphibious lift capacity will be increased to 1½ MAF (approximately 44,000 troops).

Question. What is your view of a joint European strategic force?

Answer. Whether or when there will be a joint European strategic force is of course very much a matter for the Europeans themselves to decide in the first instance. At this time, it is a matter that is talked of not for the near term but for the more distant future. Our view of such a force would depend upon the circumstances surrounding its creation, the shape it took, and its relationship to Western defense.

Question. What assistance has and does the United States provide to the British strategic force?

Answer. As you are aware, the U.S.-U.K. Agreement for Cooperation on the Use Atomic Energy for Mutual Defense Purposes was made in 1958, and the U.S.-U.K. Polaris Sales Agreement was concluded in 1963. These agreements have permitted cooperation on nuclear strategic force development of value to both parties. We have sold the British Polaris A-3 missiles and associated weapon systems equipment for their strategic deterrent and assisted them in their upkeep and routine test-launches.

For the past several years, pursuant to these previous agreements, we have furnished assistance to the UK in their Polaris missile improvement program to maintain the viability of the Polaris weapon system. In this regard, the U.S. role is to provide support for the UK program in selected areas of design, engineering and test assistance.

Question. Does the U.S. contemplate changing its policy toward assisting French strategic forces?

Answer. The question of the role of French strategic forces and their relationship to U.S. and NATO deterrent capabilities is one we have under periodic review. Our policy in this area is and will be keyed to considerations of how French strategic forces may relate to the overall Western deterrent and defense, and to the general character of the relations between our two countries.

Question. What work on ABMs has the U.S.S.R. done in the past two years? What is the nature and extent of work on a second ABM site?

Answer. Soviet ABM development is discussed in detail in Admiral Moorer's Military Posture Statement. Soviet work on ABMs during the past two years

has consisted of continuing ABM R&D. [Deleted]. No increase in deployment at the Moscow site or deployment of a second system has been undertaken.

Question. Does the U.S. plan to send ASW planes to Diego Garcia?

Answer. Diego Garcia is programmed to be an austere support facility that will have a capability to support air ASW missions, if and when these are required. U.S. ASW aircraft will operate from Diego Garcia from time to time.

Question. In Iran and Saudi Arabia, what are the nature and extent of: U.S. military liaison activities, DOD-funded projects, sales of military equipment, and projects using DOD personnel?

Answer. In Iran, we have a total of approximately 1102 DOD personnel. Major activities involving these personnel are: Army Mission (ARMISH-MAAG), EUCOM support activity, Gendarmerie Mission (GENMISH), Defense Attache Office, USA STRATCOM, Technical Assistance Field Teams (TAFT Teams) and various USAF and USA communications and airlift support activities. With the exception of the TAFT Teams, for which the Iranians reimburse us, all activities are DOD funded. [Deleted.] The total number of DOD personnel in Saudi Arabia is approximately 327. Major activities which utilize these personnel are U.S. Military Training Mission (USMTM), the Corps of Engineers (COE), and TAFT Teams, Saudi Arabia reimburses us for the TAFT Teams and the COE. USMTM is DOD funded.

Question. Please list the types, quantities, and total costs per month of military equipment and supplies furnished to South Vietnam and Laos since January 27, 1973.

Answer. The requested data for Vietnam for the period 1 February 1973 through 31 January 1974 are listed by supplying Military Departments at TAB A. Consolidated data for Laos, broken out by Calendar Quarter, for the period 1 January 1973 through 31 December 1973 are listed at TAB B.

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ARMY MAF SUPPORT TO SOUTH VIETNAM—SUPPLIES AND EQUIPMENT

[Amount in thousands of dollars]

	Quantity/amount												Total
	Calendar year 1973												
	February- March	April	May	June	July	August	September	October	November	December	Calendar year 1974, January		
Selected major items:													
Net cargo, tie down.....	1												1.0
Parachute, cargo 26 ft.....	3	1,622	2,224										3,846.0
Mask, prot, small.....		313	429										742.0
Launcher rocket, 66 mm M202.....				962									962.0
VRC receiver, RT-524.....				22				5					22.0
Radio set, AN-VRC-47.....				1				2					3.0
Radio set, AN-VRC-46.....						17							17.0
Radio set, AN/PRC-4B.....					17	38							55.0
Radio set, AN/GR-39B.....				1	24								25.0
Radio set, AN/VRC-34.....				3									3.0
Radio set, AN/GR-87.....				4									4.0
Radio set, AN/PRC-25.....				1									1.0
Telephone.....													3.0
Intercom set.....													3.0
Switchboard.....													3.0
Radio freq mon, AN/USQ 46A.....													3.0
Radio freq mon, AN/USQ 42B.....													3.0
Radio, AN/PRC-10.....													3.0
													7.0

TA/A3/PT/TP set	10	1	10.0
Detector-portable (mine)	12	1	1.0
Boat fiberglass	3	5	17.0
Pump deep well	6	2	5.0
Truck, ambulance, 1/4 ton	4	4	10.0
Truck, wrecker, 5 ton		3	7.0
Truck, tractor, 5 ton		7	35.0
Truck, dump, 5 ton		35	7.0
Truck, cargo, 2 1/2 ton		27	27.0
Truck, cargo, 3/4 ton		2	2.0
Car, armored, commando		30	30.0
Carrier, SP, M125A1		1	1.0
Carrier, cargo FT		8	8.0
Carrier, personnel armored		5	10.0
Trailer truck, water		44	10.0
Carrier, flame thrower		3	229.0
Trailer, cargo, 3/4 ton		111	2,441.0
Semitrailer, stake, 12 ton		1,326	32.0
Tank, M41A3		136	136.0
Tank, 90 mm, M48A3		1	1.0
Rifle, M16		53	53.0
Machinegun, cal 50		1	1.0
Launcher, grenade		37.0	37.0
Machinegun, 762 mm, M60		2.0	2.0
		3	3.0
		2	2.0
		4	4.0
		25	25.0
		19	19.0
		1,671	1,671.0
		16	16.0
		2,009	2,009.0
		1,593	1,593.0
		1,226	1,226.0
		26	26.0
		21	21.0
		27	27.0
		48	48.0
		55	55.0
		39	39.0

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ARMY MAFS SUPPORT TO SOUTH VIETNAM—SUPPLIES AND EQUIPMENT—Continued
[Amount in thousands of dollars]

	Quantity/amount												Total
	Calendar year 1973												
	February-- March	April	May	June	July	August	September	October	November	December	Calendar year 1974, January		
Machinegun, mt mult, cal 50.....								3				3	
								46				46	
Revolver, cal 38.....				108						53		161	
				5					2			7	
Howitzer, 105mm, towed.....			85									85	
						4						4	
Howitzer, 155 mm, towed.....						122						122	
						13						13	
Machine gun, cal 30.....						3						3	
					2			1				3	
Mortar, 60 mm.....					1			.5				1.5	
												1	
						12						12	
						60						60	
Machinegun, 7.62 mm.....												12	
												60	

See footnotes at end of table, p. 302.

Quantity/Amount

	Calendar year 1973							Calendar year 1974,			Total	
	January	February	March	April	May	June	July	August	Septem-ber	October		Novem-ber
Selected major items:												
Pistol, M1911A1												1
Rifle, M16A1												46
Machinegun, BRM2 HB											10	1,170
Machinegun, M60											92	75,532
Radio, AN/PRC											3	2,943
Board plotting, M-17											2	906
Telescope pan, M12A7's							2					
Tractor whld w/lrt, LDR-B/HOE							5					
Lathe, eng bench mid, 0.75 hp							6,161					
Comp, air 5CFM elec							10,204					
Adpt, set eng elec							2,892					
SS mech emer, RPMC							670					
TK, OM No. 2 common LP							46					
TK, auto fuel elec LP							3					
SS, radiator rebuild, 4							12,147					
TK, 3 ech M35A2C trk							3,165					
							102					
							2,113					
							246					

Reliner, brake clutch FL.....	1
SS, FM auto mtrv basic WP.....	1, 125
TK, 3Ech M52A1 5T trk.....	3
TS, F/M binocular 6 x 30.....	53, 550
TS, maint 106MM RFL.....	4
SS, small arms post CMP.....	984
TK, small arms reprmn.....	4
TS, FM MG, Cal 50.....	596
SS, FM arty.....	3
TH-5/TG terminal.....	195
Gen Ged, 1.5KW 60 CY AC.....	1
DA-75/U, dummy load.....	2, 626
TS-27B/TSM, test set.....	12
ZM-4B/U resistor BR.....	936
AN/USM 44A, sig. generator.....	4
AN/USM-181, tel test set.....	1, 132
AN/USM-159, freq meter.....	3
AN/USM-207, EI dig readout.....	5, 469
Drift EQ ST BN for CHTS.....	8
Plot, set arty fire control.....	(4)
Bag, cargo A22.....	23
Mask, prot, M17A1, small.....	16, 284
AN/USM-117, oscilloscope.....	5
	790
	1
	(4)
	1
	(4)
	1
	1, 761
	3
	4, 093
	2
	1, 303
	2
	7, 452
	1
	299
	1
	257
	14
	1, 219
	23
	55, 672
	2
	(4)

See footnotes at end of table, p. 302.

Quantity/Amount

¹ OMA-funded accessorial items as distinguished from PEMA-funded munitions shown separately below.
² Not available.
³ These values were computed on the basis of tonnage shipped. Actual dollar value will be tabulated on the basis of search of microfilm records currently en route from Hq USARPAC to Hq ARMCO.
⁴ No charge.

² Not available.

² Not available.

² Not available.

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AIR FORCE SUPPORT TO SOUTH VIETNAM

[Cost in dollars]

	February	March	April	May	June	July	August	September	October	November	December	January	Total
Equipment and supplies: Air-													
craft:													
Other equipment and sup-													
plies:													
A/C support equip/spares	12,250,013	21,358,311	18,572,567	15,371,030	19,033,842	2,676,457	2,580,221	5,204,109	3,886,061	2,770,792	5,939,323	3,316,225	112,958,951
Missile equip/spares	7,779	421,057	2,175	39,536	12,250	20	3,345			672	2,800	649	490,283
Combat vehicles	280,000		70,000		153,126								503,126
Tactical vehicles	2,641,121	351,167	1,452,007	133,491	1,465,720	104,672							6,148,178
Weapon equip, equip/													
spares	1,989,272	765,779	1,247,660	171,833	197,152	200,035	222,080	35,457	111,497	51,190	149,675	69,649	5,211,279
Ammunition	2,900,792	5,712,007	13,188,529	6,632,209	16,639,916	2,260,119	6,398,904	672,900	348,194	1,151	8,450,122	66,403	63,271,246
Communication equip/													
spares	1,333,848	4,534,429	2,904,778	2,504,939	7,382,088	393,480	550,426	671,040	1,022,531	401,323	686,317	284,710	22,669,909
Support equip	3,926,314	4,135,733	5,468,831	1,462,912	1,150,714	1,340,050	529,518	825,695	661,620	569,483	610,213	388,736	21,069,829
Supplies and consum-													
ables	4,160,466	2,546,874	4,782,186	1,567,597	5,682,040	643,944	4,916,519	1,649,803	646,029	645,131	707,673	3,330,755	31,279,617
Contract tech and serv-													
ices (M1)	1,155,883	675,617	4,980,701	4,327,545	593,012	319,241	676,393	745,520	10,924,033	1,657,578	451,718	1,403,069	27,910,310
Repair and overhaul (M2)	4,369,944	390,114	2,716,554	533,578	3,321,715		2,399,955	2,074,565	780,422	751,834	980,863	370,555	18,680,089
Total	35,015,432	40,891,083	55,385,988	32,744,670	55,631,575	7,938,028	18,277,361	11,879,089	18,380,387	6,849,154	17,978,704	9,230,751	310,202,227

1 None except for 3 each C-130A which were exchanged on a 1-for-1 basis (action completed in August 1973) to provide the VNAF with a standard configured fleet of C-130A's.

LAOS CALENDAR YEAR 1973 DELIVERIES
[Value figures rounded to thousands of dollars]

Item	1st quarter		2d quarter		3d quarter		4th quarter		Total	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Aircraft cargo C-123K.....	10	()	2	()	4	()			12	()
Aircraft trainer T-41B.....									4	()
Aircraft trainer T-28D.....							14	2,800	14	2,800
Helicopter OH-1H.....							4	1,276	4	1,276
Helicopter OH-1H.....									1	282
Helicopter observation O-1A.....			1	282					1	()
Aircraft mod. AGE.....	XXX	121	XXX	54	XXX	50	XXX	312	XXX	537
Aircraft spare parts.....	XXX	1,816	XXX	1,811	XXX	1,968	XXX	918	XXX	6,513
Total aircraft.....	XXX	1,937	XXX	2,174	XXX	2,018	XXX	5,210	XXX	11,312
Landing craft mechanized.....			6	()					6	()
Ship spare parts.....	XXX	6	XXX	9	XXX	27	X	13	XXX	55
Total ships.....	XXX	6	XXX	9	XXX	27	XXX	13	XXX	55
Armored cars.....	63	54	22	72	2	72			4	144
Trailers, all types.....	41	81	42	83	28	89	1	2	86	84
Trucks, 1/4 ton, all types.....	4	14	28	123	7	30			111	253
Trucks, 3/4 ton, all types.....	195	1,507	24	230	1	10	22	94	61	261
Trucks, 2 1/2 ton, all types.....	15	162	2	23	1	25	12	143	232	1,890
Trucks, 5 ton, all types.....	2	9	4	20			3	48	21	258
Commercial ambulances.....									6	29
Commercial trucks.....			2	4					2	4
Pistols.....	383	17	155	8			143	7	681	32
Rifles.....	9,295	1,173	78	()			4,000	568	13,373	1,741
Machineguns.....	102	59	148	105	412	291			662	455
Mortars, 60 mm.....	25	()			99	()			124	()
Other weapons up to 75 mm.....					30	78			30	78
75 mm howitzers.....	3	()							3	()

185 mm howitzers.....	4	183	1	17	12	753	17	953
75 mm recoilless rifles.....	15	20	(1)	50	137		19	26
81 mm mortars.....	25	(1)	18	138			85	137
107 mm, 4.2-inch mortars.....			XX	280	19	17	XX	138
Other weapons and ordnance equipment.....	XX	66	XX	XX	XX	XX	XX	382
Weapons spares.....	XX	315	XX	192	129	127	XX	763
Automotive supplies and equipment spares.....	XX	230	XX	375	189	221	XX	1,015
Total vehicle and weapons.....	XXX	3,890	XXX	1,698	1,075	1,980	XXX	8,643
Ammunition and components.....	xxx	41,705	xxx	25,070	1,185	59,066	xxx	127,026
Telephone sets.....	396	19	29	1	84	5	524	25
Telephone plus telephone terminal plus transmitting equipment.....	5	9	13	15	6	8	36	37
Radio tactical.....	35	9	362	375	309	230	1,107	943
Radio relay equipment.....			2	6			2	6
Radio receiving equipment.....	35	6	20	27	134	14	51	67
Public address equipment.....	xxx	295	xxx	207	xxx	236	xxx	876
Other communications equipment.....	xxx	120	xxx	104	xxx	121	xxx	384
Communications equipment spares.....								
Total communications equipment.....	xxx	458	xxx	737	xxx	596	xxx	2,321
Military bridges.....								
Tractors, CRLR and WHLD.....	9	158	10	354			10	354
Major construction equipment.....	2	39	3	86	1	24	66	310
Fork lift trucks.....			4	55			6	118
Generators, 30 kW and larger.....				33			4	35
Prefab buildings.....							3	27
Tool kits and sets.....	42	19	27	192	17	10	68	29
Fire trucks.....			4	(1)			1	17
Miscellaneous other support equipment.....	xxx	1,126	xxx	2,011	xxx	2,414	xxx	5,432
Other supplies.....	xxx	6,405	xxx	2,895	xxx	3,779	xxx	14,651
POL gases and fuels.....	xxx	1,189	xxx	1,533	xxx	847	xxx	4,191
Total other equipment and supplies.....	xxx	8,976	xxx	7,176	xxx	7,074	xxx	25,354
Grand total.....	xxx	56,972	xxx	36,837	xxx	11,975	xxx	174,711

1 Excess defense articles provided at no cost to the MASF program for fiscal year 1973 and prior years. 2 Adjustment of billing data.

Question. How many Americans financed by the US Government were or will be in South Vietnam as of 27 January 1973, 31 December 1973, 30 June 1974 and 31 December 1974? Please break out in terms of official-civilians, official-military, official-contract employees, and civilian-contract employees.

Answer. On 27 January 1973, U.S. military forces remaining in South Vietnam totaled 23,516 personnel; 730 DoD U.S. civilian personnel were assigned to the Military Assistance Command, Vietnam, or its components; and 5,237 U.S. citizen contractor personnel were employed in South Vietnam. On 31 December 1973, U.S. military personnel authorized in South Vietnam totaled 221 (50 assigned to the Defense Attaché Office, 15 assigned to the Four Party Joint Military Team, and 156 Marine guards assigned to the U.S. Embassy); 1,200 DoD U.S. civilian personnel were authorized to the Defense Attaché Office, of whom 874 were assigned; and 2,752 U.S. citizen contractor personnel were employed in South Vietnam. The tentative projections for 30 June 1974 are 221 military personnel, 936 DoD U.S. civilians and 2,130 U.S. contractor personnel employed. No further changes are forecast in the number of military and DoD U.S. civilians authorized in South Vietnam on 31 December 1974. While further reductions in contractor personnel will probably be feasible by that date, we cannot as yet project accurately what number we expect to employ at that time.

Question. How much (1) military and (2) economic aid was provided to North Vietnam by USSR, China, and other allied nations in 1972 and 1973?

Answer. (The information is classified and has been furnished to the Committee)

Question. What are the actual or estimated figures for the number of US military personnel stationed in Japan, Thailand, Korea, Taiwan, and the Philippines as of 1 January 1974, 30 June 1974 and 31 December 1974?

Answer. (The information is classified and has been furnished to the Committee.)

Question. How many US military personnel are expected to be assigned to naval vessels operating off the coast of Indochina as of 30 June 1974?

Answer. It is difficult to predict exactly what ships of the 7th Fleet will be off the coast of Vietnam, Cambodia, and Thailand on 30 June 1974. However, assuming there are no significant changes to current operating patterns, the number will be approximately 8,100, including embarked Marines.

Question. How many third country personnel does the US finance in each of the countries of Southeast Asia in FY 1974 and 1975?

Answer. The following information pertains to third country nationals financed by the Department of Defense. A special case is the Thai volunteer program in Laos. As of 1 February 1974, there were 4,819 men in this program. Of this total, 3,980 were deployed in Laos and 839 were in the process of being discharged in Thailand. The program will be completely terminated by the end of fiscal year 1974. In Cambodia, the Department of Defense employs 72 third country nationals, and this employment figure is projected through fiscal year 1975. Third country nationals employed by the Department of Defense in South Vietnam numbered 347 on 31 December 1973, and this number is forecast to be reduced to 221 by the end of fiscal year 1974. By the end of fiscal year 1975, the number of third country nationals hired by the Department of Defense is projected to be 89 in South Vietnam. In Thailand there are 27 third country nationals employed by the Department of the Navy and this figure is expected to remain constant throughout the remainder of fiscal year 1974 and in fiscal year 1975.

Question. How much of the money requested for assistance to South Vietnam will go to finance petroleum imports?

Answer. The budget request includes \$42.9 million for FY 1974 and \$86.8 million for FY 1975 for the petroleum imports to South Vietnam.

Question. What are the average monthly rates for ammunition usage, aircraft sorties, etc. for South Vietnam since January 27, 1973? What are the assumed usage rates used in projecting the FY 1975 budget request?

Answer. (The information is classified and has been furnished to the Committee.)

Question. What is the estimated strength of insurgent forces now fighting in the Philippines? How has that changed in the past year? What assistance will the United States provide in fiscal years 1974 and 1975?

Answer. There are an estimated [deleted] Muslim dissidents currently engaged in anti-government activities, principally in Mindanao.

[Deleted.]

In Luzon, an estimated [deleted] members of the Maoist New Peoples Army continue to conduct ambushes of security forces, sabotage, kidnappings, and other acts of violence. [Deleted.] In fiscal year 1974, our Security Assistance for the Philippines will provide \$16.3 million in grant military aid, \$0.5 million in training assistance, and an additional \$3.0 million in Foreign Military Sales Credit [deleted]. The program has been reduced from planned levels as a result of funding actions reallocating resources [deleted]. The fiscal year 1975 program is not yet final. Our assistance, [deleted], is designed to improve the mobility of the Philippine armed forces (transport aircraft and helicopters), improve infantry firepower and communications (radios and spares), increase the naval patrol and interdiction capability (patrol ships and craft), bring ammunition stockage up to authorized levels, and upgrade Philippine self-sufficiency in the maintenance field.

Question. What is the estimated strength of the insurgent forces now fighting in Thailand?

Answer. (The information is classified and has been furnished to the Committee.)

Question. How has that changed in the past year?

Answer. (The information is classified and has been furnished to the Committee.)

Question. What assistance has the US given or is planned to be given to cope with this?

Answer. In FY 1973, Thailand was shifted to the Military Assistance Program from the Military Assistance Service Funded Program (MASF). In FY 72, the MASF Program for Thailand was 90 million dollars. The Grant Aid Program in FY 73 totaled \$40 million. In FY 74 it was \$36 million. The Security Assistance Guidelines include planning for counterinsurgency as a high priority requirement. The great majority of military equipment provided is relevant to both counterinsurgency and defense missions. Planning beyond the FY 74 total of \$36 million is not yet final.

Question. How many Americans are expected to be involved in training or advising counterinsurgency forces in FY 75?

Answer. There are currently about 520 personnel authorized in the US military Assistance Command, Thailand (USMACTHAI). The mission of the Military Assistance Command, Thailand, is to provide support and assistance to the Thai Armed Forces. There are no US personnel assigned with Thai units below the regimental level and none assigned to field operations. Personnel levels for FY 75 have not yet been decided.

Question. What percentage of GNP did the US and each of its NATO, SEATO and other allies spend on defense in 1973? How much per capita?

Country	National expenditure ¹	
	Percent of GNP	Per capita (U.S. dollars)
United States.....	6.8	377
Canada.....	2.3	104
European NATO:		
Belgium.....	3.1	120
Denmark.....	2.5	110
France.....	4.2	173
FRG.....	3.8	182
Greece.....	4.8	64
Italy.....	3.4	75
Luxembourg.....	1.0	75
Netherlands.....	3.7	139
Norway.....	3.7	149
Portugal.....	7.5	75
Turkey.....	4.5	21
United Kingdom.....	5.6	147
NATO Europe.....	4.1	123
NATO minus United States.....	4.0	122
Total NATO.....	5.5	220
Other SEATO:		
Australia.....	3.5	119
New Zealand.....	1.9	16
Philippines.....	1.2	25
Thailand.....	3.6	58
Other CENTO:		
Iran.....	10.0	50
Pakistan.....	7.8	5
Other allies:		
Japan.....	.9	25
Korea.....	4.9	15

¹ Data for the United States and most other countries are for calendar years; data for Australia, Iran, New Zealand, and Pakistan are for fiscal years.

Question. What countries received what amounts of funds for defense purposes under Public Law 480, section 104(c) in FY 1974? What are the projected amounts for FY 1975?

Answer. The following table (data furnished by AID) shows countries receiving Public Law 480, Section 104(c) funds for defense purposes in FY 1974 and the amounts received.

	(Millions)
Cambodia.....	¹ \$155.3
Vietnam.....	¹ 281.0

¹ Subject to change in view of fluctuating commodity availability and prices.

Section 40 of the Foreign Assistance Act of 1973 will affect the use of Public Law 480, Section 104(c) funds for defense purposes after 30 June 1974. In light of the foregoing, DOD has been informed by AID that projected amounts for FY 1975, which are normally provided in the Congressional Presentation Document due on 1 April 1974, have not been formulated as yet.

Question. In what countries to which the U.S. provides military assistance is planned U.S. aid at a level equivalent to greater than 20 percent of what that country budgets for its own defense? What are the percentages?

Answer. Five countries are planned to receive military assistance in Fiscal Year 1975 at a level greater than 20% of their respective defense budgets. [Deleted.]

Question. What types of equipment and amounts of military aid have been furnished in the past year by USSR, China, Libya and other major arms or aid providers to the nations or groups in the Middle East which are armed to fight Israel? If possible, please show amounts before, during, and since the October war.

Answer. The information desired as to the types and amounts of military assistance provided during 1973 to the nations in the Middle East armed to fight Israel is supplied in the classified tables 1-3. [Tables deleted.]

Question. What are the planned characteristics of and rationale for the planned new, smaller nuclear submarine?

Answer. The exact characteristics will not, of course, be known until the design process for which funds are requested has been completed. What is wanted is a smaller and less costly option than Trident. Such an option would give us greater procurement flexibility in the 1980-90 time frame than would be possible if the only candidate available then for replacement of our aging SSBNs were the Trident. Trident has great capability and great potential. However, we need not irrevocably commit ourselves to an entire force of that same top grade capability at this time.

To have a smaller, less costly ship, we have to specify that the missiles will be no larger than the Trident-I missile, and that the number of missile tubes will be less. For controllability, safety, and survivability the submarine needs a certain speed and mobility. Therefore, we either have to limit the number of missiles or permit an increase in size and power in order to keep the ship characteristics balanced. The instructions provided to the Navy are these, generally:

(a) Develop a design for a new strategic submarine, SSBN-X, of a size close to that of today's Poseidon class SSBN, but incorporate as much quieting as feasible.

(b) Base the propulsion plant upon the reactor plant of USS Narwhal, a reactor design which we have in hand.

(c) Design the ship to carry 16 Trident-I missiles, constraining the missile tube size to about that of today's SSBN. It is not to feature growth potential for larger missiles. Identify the tradeoffs in featuring less than 16 missiles.

(d) Incorporate a sonar of advanced capability similar to that of Trident.

(e) Throughout the design, stress simplicity and careful attention to tradeoffs which will hold down costs and size.

If we start now, in FY 75, on a design for an all-new strategic submarine, smaller than Trident, we provide for availability of a lesser unit cost ship in the early 1980's (circa 1982) as a ship-for-ship replacement for the bulk of our aging SSBN force. This new SSBN is not a replacement for Trident, which represents a capability in weaponry and survivability which is not achievable in a smaller submarine. Trident offers the most growth potential to accommodate weapon improvements possible in the future. In addition to providing for a significant increase in throwweight at long ranges, the longer missile ranges assure greatest survivability. Only the larger Trident submarine can deploy the larger Trident II missile with the potential and flexibility it affords. That flexibility could be extremely important to us as we view the entire complex nuclear arms picture. For the capability represented by Trident, that system is the most cost-effective route. The new SSBN-X may, however, permit setting an upper limit on the numbers of Tridents required if replacement of Polaris/Poseidon SSBNs is the principal controlling factor in the future. The proper force mix for the future also depends, of course, on the outcome of the SALT II negotiations.

Question. How much is in the budget for development of new, smaller tactical nuclear warheads. What are the rationale and timetable for this change in U.S. capability?

Answer. There are funds in both DoD and AEC budgets which pertain to development of tactical nuclear systems using the most advanced technologies. The AEC budget includes \$27 million in advanced research, development and testing for new technology related to tactical systems. All of this money is in the level of effort funding of the three nuclear research laboratories. The Army budget includes approximately \$4.75 million that can be identified as funds for studies and development of ballistic shapes, fuzing, and other hardware related to new nuclear artillery warheads. An additional \$3.75 million pertains to missiles. ADM, fluidic technology for adaption kits, safety and reliability studies. The Navy and Air Force budgets contain funds for feasibility and concept studies that cannot be directly attributed to new, smaller tactical nuclear warheads, but which support technology that is needed for more accurate conventional or nuclear systems such as stand-off, terminally-guided, all-weather missiles.

In response to the second part of the question, it should first be noted that seeking smaller tactical nuclear warheads is not new. We had the Davy Crockett, a [deleted] nuclear rocket, in the stockpile from 1961 to 1970 and currently have the [deleted] Walleye air-to-surface missile, [deleted] ADM, [deleted] 155mm artillery round, and a [deleted] capability for the 8-inch nuclear warhead in the stockpile. In addition, several of our [deleted]. Examples are the B61 bomb [deleted], the B57 bomb [deleted] and the Lance warhead [deleted]. We continue to seek more accurate systems and more lethal effects from lower yields to improve military effectiveness and decrease collateral damage. Such improvements increase the credibility of our tactical nuclear stockpile thereby enhancing deterrence. The new tactical warheads in this category we expect to field are the Condor (if it proves successful) in [deleted] new 8-inch projectile and a modular guided glide bomb in [deleted]. A Pershing II warhead, now in the conceptual stage, could be fielded in about [deleted].

Question. Have there been delays and/or problems with proceeding with homeporting in Greece and Japan? What else is planned to be done in FY 1975?

Answer. We have experienced no consequential delays in implementing the Overseas Family Residence Program for the carrier *Midway* and other naval vessels in Japan. On the other hand, owing primarily to the Greek political situation, there have been unanticipated delays in the achievement of the many preparatory actions necessary to effect an orderly implementation of the carrier phase of the Athens homeporting program. Assuming the necessary preparatory actions are satisfactorily completed in a timely manner, we would expect to implement this phase in FY 75.

The CHAIRMAN. Admiral, is there anything you wish to say?

Admiral MOORER. No, sir. Nothing further.

The CHAIRMAN. Senator Thurmond.

Senator THURMOND. Mr. Chairman, I just wanted to make the statement that in my judgment, our country is indeed fortunate to have as Secretary of Defense a man like Dr. Schlesinger, and a man as Chairman of the Joint Staff like Admiral Moorer. I realize that a lot of people in this country are misinformed about the military forces. They say, we have got to reverse priorities. We have already done that. In 1969, for instance, the military budget was 42 percent of the total budget. And now it is about 28 percent. But at any rate, I for one appreciate the President appointing men of the ability and the vision and the dedication of these two gentlemen here today.

Secretary SCHLESINGER. Thank you, Senator.

Admiral MOORER. Thank you.

The CHAIRMAN. Do you have anything further?

Senator MCINTYRE. No, I just want to thank both of these gentlemen for their fine answers—and some the poor answers.

The CHAIRMAN. I think you have made a fine presentation, gentlemen. And you have been able to cover it all in 1 day and also cover the questions all in 1 day. It is a fine record that you set. And it could have been done only if you were well prepared.

I was disappointed, frankly, that we weren't able to reduce the budget some after we stopped fighting the war, which was a big war in cost. I warned at the time, while it was still going on, that there wouldn't be any great reduction afterward, because we had to replenish things and get caught up, and so forth. But I don't expect any jump from last year like this one is. And I don't think you did either, frankly. You just put in some extra money there. And I hope you won't use all of it if we appropriate it. If there are any soft spots in it, you will probably find them. And I don't think you can dismiss these

things by saying that a certain percent of the gross national product is not as high as it was. And when you add up all the obligations this country has, that is the only way you can get an idea of the debt.

I think you will be judicious in spending your money. I am glad to see each one of you in the position you are in. I have a lot of confidence in you.

Secretary SCHLESINGER. Thank you, Mr. Chairman. We are prepared to come back to the committee at any time to give a classified briefing, if you should wish to have that.

The CHAIRMAN. Thank you very much. Doubtless we will want you to come back sometime. We will proceed now to the different services, as you know. And then we will call on you.

Again, with the thanks of the committee, we will take a recess at the call of the chair.

[Whereupon, at 5:25 p.m., the committee was adjourned, subject to the call of the chair.]

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